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ESSAYS
ON THE
DISEASES OF THE EYE.

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(Continued from p. 687.)

THE DISEASES OF THE CONJUNCTIVA.

DISEASES of the conjunctiva form a large proportion of the ailments for which patients apply at an ophthalmic institution, constituting, with the affections of the lids, lachrymal apparatus, and parts connected, at or about two-thirds of the sum total of all the cases entered in the books. I have collected the statistical records of the West of England Eye Infirmary, the Royal London Ophthalmic Hospital, the Birmingham Eye Infirmary, the Manchester, Glasgow, and Edinburgh Eye Infirmaries, the tables of which I subjoin, furnishing a rough estimate of these facts.

It will be seen from these computations, that the smallest average proportion of the whole number of diseased appendages to the sum total of cases entered in the books, is about three-fifths of the number; and taking into consideration the proportion in the larger institutions, I think that two-thirds scarcely exceed a fair average, especially when we reflect that many of the slighter cases are not entered at all.

WEST OF ENGLAND EYE INFIRMARY.

Year.	Total No. of Cases Admitted.	Inflammation of the Conjunctiva.	Diseases of the Lids.	Epiphora.	Dis. of the Lachrymal Apparatus.	Total No. of Diseased Appendages.	Proportion.
1837-8	1004	460	205	3	25	693	2-3rds.
1838-9	957	456	171	5	28	660	2-3rds.
1839-40	1059	485	229	3	20	737	2-3rds.
1840-41	906	394	189	6	25	614	2-3rds.
4 years.	3926	1795	794	17	98	2704	2-3rds.

ROYAL LONDON OPHTHALMIC HOSPITAL.

Year.	Total No. of Cases Admitted.	Inflammation of the Conjunctiva.	Affections of the Lids.	Pterygium.	Dis. of the Lachrymal Organs.	Total No. of Diseased Appendages.	Proportion.
1838	4774	2933	679	4	86	3162	2-3rds.
1839	4701	2874	580	4	86	3544	2-3rds.
1840	5255	3147	734	..	74	3959	2-3rds.
3 years.	14,820	8954	1993	8	246	10,665	2-3rds.

BIRMINGHAM EYE INFIRMARY.

Year.	Total No. of Cases Admitted.	Inflammation of the Conjunctiva.	Affections of the Lids.	Dis. of the Lachrymal Organs.	Miscellaneous.	Total No. of Diseased Appendages.	Proportion.
1836	809	475	133	21	3	632	2-3rds.
1837	872	369	89	15	4	477	1-half.
1838-9	2229	990	182	46	278	1496	2-3rds.
4 years.	3910	1834	404	82	285	2605	2-3rds.

MANCHESTER EYE INFIRMARY.

Year.	Total of Cases Admitted.	Conjunctival Inflam.	Pterygium.	Affect. of Lids.	Affect. of Lachrymal Organs.	Ecchymosis.	Tumour in canthus	Epiphora.	Total of Diseased Appends.	Proportion.
1839-40	1837	796	3	172	0	1	2	3	977	1-half.
1840-41	1756	779	—	162	23	..	..	3	967	3-5ths.
1841-42	1499	713	2	118	19	..	..	..	852	3-5ths.
3 years.	5092	2288	5	452	42	1	2	6	2796	3-5ths.

GLASGOW EYE INFIRMARY.

Year.	Total No. of Cases Admitted.	Conjunctival Inflammations.	Affections of the Lachrymal Organs	Affections of the Lids.	Total of Diseased Appendages.	Proportion.
1839	966	450	13	75	538	3-5ths.
1840	966	504	24	78	606	2-3rds.
1841	844	438	19	71	528	2-3rds.
3 years.	2776	1392	56	224	1674	3-5ths.

EDINBURGH EYE INFIRMARY.

Year.	Total No. of Cases Admitted.	Conjunctival Inflammations.	Affections of the Lids.	Affections of the Lachrymal Organs.	Total of Diseased Appendages.	Proportion.
1841	446	120	82	8	210	1-half.
1 year.	446	120	82	8	210	1-half.

The conjunctiva offers frequent examples of all the diseases and affections to which mucous membranes and muco-cutaneous surfaces are exposed. We may witness simple congestion, or hyperæmia, without inflammation; hyperæmia with hæmorrhage; anæmia; simple inflammation, active or passive, acute, subacute, or chronic, partial, or general; catarrhal inflammation; purulent inflammation, acute and chronic; gonorrhœal inflammation; strumous inflammation; pustular inflammation; exanthematous inflammation; granular inflammation; ulceration; fungous growths; adhesion (symblepharon); opacity and thickening; polypoid, warty, malignant, and other tumours; pterygium; wounds, and impaction of foreign bodies; œdema; ecchymosis; emphysema of connecting cellular tissue; abscess of subconjunctival tissue; injury and inflammation from caustic or irritant substances; irritation from lachrymal concretions; morbid dryness, and cuticular change; staining from nitrate of silver; scalds and burns.

These diseases and pathological states of the conjunctiva are most of them of daily occurrence, and form, as I have shown, the great bulk of ophthalmic treatment. Some forms are confined to the palpebral conjunctiva, some to the ocular portion of this membrane, whilst others spread to and involve the whole tunic. In its inflammatory affections we see every grade of the process from the mildest to the most rapid, from the most acute to the most chronic, and from the most active to the most passive. The reasons are obviously dependent on the nature and intensity of the exciting causes, the great diversity of constitution, the dissimilarity of age, sex, and temperament, idiosyncracy,

and predisposition. An exposure to damp and cold will produce in one man acute inflammation and abscess of the tonsils of an active type, and in another a passive inflammation of the soft palate, uvula, and tonsils (relaxed sore throat); so, in like manner, a similar exposure will occasion in one person an inflammation of the conjunctiva exactly similar to the latter form of sore throat, and in another an inflammation of the most active and acute characters.

Diseases of the conjunctiva, moreover, attack all ages, from the infant just born, or even in utero (for some are congenital), to the old man bending under the weight of years, and sinking gradually into the grave from climacteric decay; all constitutions, from the most plethoric to the most depressed, from the most healthy to the most diseased or deranged; occur in all climates, especially, however, in those which are variable and damp, sparing neither sex nor species.

Connecting links are not wanting to show the relation of conjunctival diseases to one another; for we pass from simple inflammation to its modifications by specific constitutional conditions, as struma, small-pox, &c., to catarrhal inflammation, to purulent inflammation, and from this to the granular. In fact, to understand diseases of the eye philosophically, and treat them rationally and with great success, it is necessary to be thoroughly acquainted with the laws of health and disease of the body generally, to possess an enlarged and unprejudiced knowledge of the applicability of remedies, to use a considerable portion of common sense, and not be blinded by terms, since ophthalmic pathology is rarely anything more than an individual illustration of disease, as seen in other situations, and of general laws possessing a general influence;—in no instance to adopt a routine practice for a name, but always to adapt remedies to the actual pathological condition, and by no means to treat an inflammation of the throat and of the conjunctiva differently, if they agree in character, occur in similar constitutions, sexes, ages, &c., and have not been already modified by treatment, merely because one is called cynanche, and the other ophthalmia.

The exciting causes of conjunctival disease are either strictly local or constitutional; the more acute affections generally owing their origin to exposure to atmospheric vicissitudes, mechanical or chemical injury, or to specific contagion; the more chronic to constitutional derangements, with or without congestion of the vessels of the head generally, excessive snuff-taking, or the abuse of wine and ardent spirits. I will now pass on to consider the individual affections of the conjunctiva.

Vascular Disturbance without Inflammation.

Under this head I intend to consider, 1st simple vascular fulness; 2nd, deficiency of blood; thirdly, hæmorrhage from the conjunctiva.

Conjunctival hyperæmia is an important symptom in many of the diseases of the eye, as I shall have hereafter to explain, and in many other affections connected with determination of blood to the head. We look at the conjunctiva for information in apoplectic subjects, in fever, or inflammatory disorders of the brain, and are often called on to prevent active congestions from passing into the stage of inflammation, when occasioned by mechanical injury or irritation.

Anæmia, also, is a valuable criterion in affections of the head dependent on exhaustion; one frequently resorted to in the diagnosis of amaurosis, and as a guide, amongst other symptoms, for treatment.

Hæmorrhage from the Conjunctiva (vide author's paper, Med. Gaz., vol. ii., 1839-40, p. 837).—It would seem that hæmorrhages are most likely to occur spontaneously from mucous membranes, being, in the generality of cases, the result of transudation through the coats of the blood-vessels and the investing membrane, or more rarely from direct rupture of some vascular branch. When depending on transudation the condition necessarily supposes a pre-existing condition of capillary hyperæmia, which may be either active, passive, symptomatic, or sympathetic, and either active or passive in its local and general symptoms, with every intermediate shade. As all the mucous membranes are predisposed to spontaneous hæmorrhages, so those are especially which are most active in their functions, and receive the largest vascular supply; hence the frequency of hæmoptysis, hæmatemesis, and melæna, and the comparative infrequency of hæmorrhage from the conjunctiva. That hæmorrhages occasionally do take place from the conjunctiva the following cases will prove:—

Case 1.—A delicate, strumous child, about four years of age, during the spring months of 1838 became affected with a severe catarrh. There was cough, coryza, and slight fever. At the same time both eyes were congested, and there was a slight catarrhal discharge from the conjunctivæ. On seeing the child one morning I discovered that blood was slowly escaping from between the lids, and learnt from the mother that one or two teaspoonfuls had already been lost. The conjunctivæ presented an ecchymosed appearance. By a gentle local astringent this was readily suppressed, and did not recur during the continuance of treatment.

Case 2.—An infant was brought to the West of England Eye Infirmary suffering from purulent ophthalmia, which had existed several days; but, although there was consi-

derable discharge, yet the corneæ of both eyes were sound and transparent. One morning of admission the mother brought the child into the room in great alarm, stating that the eye was bleeding. In this case blood slowly trickled from between the lids, mixed with the discharge. The conjunctivæ were deeply injected, and presented the appearance of ecchymosis, as in the former case.

Remarks.—In both these cases hæmorrhage was the result of active congestion, and connected with a morbid increase of secretion from the mucous tunic, the membrane being placed for a time in that condition which I have before stated as predisposing to hæmorrhage by transudation. Although I have not met with a case, yet I have no doubt that passive transudation might result from the conjunctiva in those conditions of the system where hæmorrhages take place from so many parts of the body.

In the "London Medical Gazette" (vol. i., 1840-41, p. 32, No. 1, Sept. 23, 1840,) a gentleman, signing himself "Lector," remarks, that "the two cases of hæmorrhage from the conjunctiva detailed in a recent number of the 'Medical Gazette' by Dr. Hocken, of Exeter, are curious and interesting. They appear, however, fortunately to have been slight and easily suppressed. My acquaintance with the records of medicine is too limited to enable me to say whether they contain many such cases; but in the course of my reading some years ago I observed one or two remarkable cases of bleeding from the eye, the notes of which I subjoin."

The first is from the works of Forestus (Foresti Opera Omnia; Frankfurt, an. 1634, lib. 2nd, De Morbis Oculorum et Palpebrarum), obs. xiii., "De sanguine per tres fere septimanas ex oculis lachrymarum instar copiose emanante et profluente." Forestus saw this patient on the 23rd of April, 1581, being an old woman, ætat. 80; it was connected with jaundice. The eyes were not painful, except that they were opened with difficulty in the morning from the flow of blood. The second is by the same author, given by Dodonæus. A young girl, aged 16, whose menses had not appeared, but in whom a vicarious discharge took place from the coats of the eye. The third is from the "Phil. Trans.," No. 208, p. 51, an. 1694, being "part of a letter to Dr. Clopton Havers, F.R.S., giving an account of an extraordinary hæmorrhage at the glandula lachrymalis."

"Sir,—Since my coming to this place I have met with a very strange case. An icteral discontented woman, having a desire to die, wholly rejected the help of medicine, and within three months, being well nigh her end, there happened an eruption of blood out of the glandula lachrymalis of one of her eyes, without any external injury. There was an evacuation of two pounds of blood within the space of thirty hours. About a week after the same sluice was opened again, and she bled till she died. Now, I would fain know what blood-vessels come to that gland from which such a vast quantity of blood should be cast forth in so short a time."

These hæmorrhages are apt also to occur in hysterical young women. Dr. Laycock (Nervous Diseases of Women, &c., p. 220,) says from the eyes, ears, and inner canthi. In a cook, named Burns, bleeding took place from the inner canthi, after depletion for epilepsy and giddiness, which had existed from puberty. The menses were suppressed, and there had been pain and dimness of sight in the right eye since the bleeding.

I saw a patient who laboured under a most troublesome trickling of blood of this kind; it came from a small fungous growth projecting from the conjunctiva of the upper lid of the right eye. She was about twenty-three years of age, very hysterical; but the catamenia were regular. The bleeding recurred every morning, and lasted for several hours, whilst no treatment seemed to influence it in the slightest degree.

An interesting example is narrated by Dr. Kersten, of Magdeburg (Rusts' Mag., bd. 58, heft. 1), who remarks that there are two sources whence the blood flows in these cases; either there is a real secretion of bloody tears by the lachrymal gland, which is a very unusual occurrence, or hæmorrhage takes place from the conjunctiva of the globe or eyelids, or from the caruncula lachrymalis. It was from the latter source that the blood flowed in Dr. K.'s case, a girl of eighteen. She was the child of phthisical parents, and had but indifferent health during her childhood. When twelve she received a wound over the left orbit, so small that it left no scar visible. Soon after blood began to flow from both eyes, and continued fourteen days in such quantity as rendered her very weak, recurring every four weeks. When sixteen the preliminary signs of menstruation occurred without any uterine secretion, the hæmorrhage continuing to recur with great regularity. A physician who saw her at this time stated that the bleeding came on with regularity at ten, a.m., and at four, p.m., at each of which periods it continued for half an hour, and recurred daily for a fortnight. The blood issued in drops from the cornea of each eye, but during its flow the patient sometimes fainted. Pain in the head and eyes, a hard pulse, and considerable radiated redness of the conjunctiva, accompanied these attacks. The patient also asserted that during their continuance all objects seemed to her of a red colour.

After the preliminary symptoms had continued for some time menstruation occurred,

and the hæmorrhage ceased; this amelioration, however, lasted but a few months, the menses continuing, but the hæmorrhage from both eyes returning; and in November, 1839, she came under Dr. K's care. Her face was then covered with blood, which flowed constantly from between the lids, and she was unable to open the eyes owing to great intolerance of light. She was extremely weak, but quite sensible, and her pulse small and feeble. At that time the hæmorrhage observed a cycle of three days, continuing for that time, then disappearing for three days, and then once more recurring. In the intervals the conjunctivæ were red and tumid, the corneæ cloudy, and the eyes intolerant of light. When the blood was flowing its source was evidently the caruncula lachrymalis and the conjunctiva, and in the course of three days the quantity amounted to eight or ten ounces. The patient's general health was much impaired, and she had an anæmic and leucophlegmatic appearance.

She continued only ten days under Dr. K.'s observation, but at the end of a year he saw her again. During the interval her general health had much improved, and the hæmorrhage occurred much less frequently, and no longer at regular intervals, sometimes not for three weeks. She remained in the hospital eighteen days, during which time it occurred once to the amount of four ounces, but ceased within six hours. She did not on this occasion come into the hospital on account of the hæmorrhage, and accordingly left as soon as another ailment was cured.

As regards treatment, it would be superfluous for me to treat of it in this place.

Simple Conjunctivitis (Acute).

Simple inflammation of the conjunctiva is very common, and occurs with little or no increase of the mucous secretion. It is either general or confined to the lids, active or passive, acute or chronic.

Active Acute General Conjunctivitis. — This form of the disease is often very sudden in its access, and resembles the effects produced by the introduction of a foreign body between the lids; I have known this so much so, that the patient has named a certain spot where, on encountering a current of air, he has felt a sudden prick in the eye, followed by roughness, feeling of sand, pain, and lachrymation.

We rarely see the patient until the disease has existed several hours, when we find on examination that the conjunctiva of the lids and globe is red, its vessels distended, that the eye waters profusely, and that the lid is more or less spasmodically closed from an intolerance of light. The redness of the tunic usually commences on the lids, extending to the globe; is of a bright scarlet colour, and proceeds from the inflammatory injection of the superficially-placed conjunctival vessels and capillaries. In the early stage of the affection we can readily see the individual vessels, the aggregate of which impart the scarlet colour to the tunic; they form numerous anastomoses, constituting a complete vascular network, and from the looseness of the conjunctiva can be readily moved on the sclerotica, through the medium of the lids. From these causes the conjunctiva appears swollen, and its surface uneven, becoming more so at a later period from effusion of serum. The flow of tears, which the patient describes as scalding, is sometimes profuse, especially when the patient endeavours to employ the eye, or it is exposed to the light by examination. This symptom increases with the increase of the disease, and diminishes and disappears as the symptoms generally are alleviated and cured. With this symptom also we find a certain degree of spasmodic action in the orbicularis palpebrarum associated, depending on the increased sensibility of the filaments of the fifth nerve, as I shall have especially to explain under the heads of strumous conjunctivitis. In severe cases these latter phenomena entirely prevent all employment of the affected eye.

We learn from the patient that he suffers pain and considerable annoyance from the disease, and that the light is offensive and painful to him. The pain is of a smarting and burning character, and is quite superficial, being unattended by any pain in the brow or head, whilst the other annoying sensations are very characteristic. At first they consist of a sense of stiffness and dryness, which gradually disappear, and on every motion of the lids or eye a most distressing feeling of dust or sand rolling between the globe and lids. The intolerance of light is rarely a very painful symptom, and is dependent on the same cause as the lachrymation and closure of the lids, viz., on an increased sensibility of the fifth nerve.

As the disease proceeds, these symptoms increase in severity; the redness augments and advances to the cornea, stopping abruptly around the cornea, whilst the individual vessels are less conspicuous, and give an almost uniform bright scarlet tint to the tunic, and the larger trunks, by their junctions and divisions on the lids and over the globe of the eye, forming a complete reticulation. In some very acute cases slight ecchymoses are sometimes formed between these branches. The inflammation also extends to the subconjunctival cellular tissue, and leads to inflammatory œdema of that structure, by which the conjunctiva acquires a puffy appearance, and is slightly elevated around the cornea, being a slight form of the affection termed chemosis.*

* It will be unnecessary to describe the subacute, subactive form of the disease, in

Simple inflammation of the conjunctiva rarely extends to deeper seated tissues, or gives rise to any dangerous consequences. In certain constitutions, and from neglect, it may pass into a chronic state and prove troublesome, but its usual duration, under favourable circumstances and active treatment, is short, being from twelve hours to three or four days.†

The constitutional symptoms of this form of conjunctivitis consist of general excitement and slight febrile derangement; the skin is apt to be hot, the pulse full and frequent, sometimes decidedly *hard*, the bowels are almost always confined, and the tongue is coated with a slimy fur.

The disease is almost invariably confined to *one eye*, whilst catarrhal ophthalmia, which some writers consider as synonymous, affects *both*.

The diagnosis of the disease is easy after a little experience. We may always know that the conjunctiva is inflamed by the *extent* of redness, by its spreading from the lids over the conjunctiva oculi to the margin of the cornea, by the scarlet colour of the redness and the network formed by the vessels, whilst these vessels themselves are readily moved on the subjacent sclerotic. We know that it alone is involved by the absence of pain over the brow, or in the prominence of the malar bone, and by the simple presence of a sensation of sand between the lids, without any deep-seated pain in the eyeball, and by the appearance of the cornea and iris, &c. From the presence of a foreign body between the lids, it is known by the absence of pricking or roughness, especially affecting some one limited spot, or, if there be any doubt, by inverting the lid over a probe and examining its internal surface, and the fold formed by its reflection from the lid to the globe.

In healthy individuals simple active acute conjunctivitis, when seen early, and treated actively, is not a dangerous disease, for under these circumstances there is little danger of the spread of disease to the cornea, and to deeper and more important tissues. Should, however, the health be very unfavourable, and the disease neglected, considerable trouble may be experienced, although the danger is not much of ultimate injury to vision.

The causes of the disease are similar to those usually concerned in the production of active acute inflammation. Vascular fulness of the system, luxurious living, and excessive employment of the organs predispose. In general the health is more or less deranged, the abdominal ganglionic system out of order, or the head congested, prior to the commencement of the conjunctivitis on the application of some exciting cause. Under these circumstances, agents, which would not have originated evil in a perfectly healthy state of the constitution, now excite the affection. The more frequent exciting causes are exposure to a current of cold damp air, especially when there has been any sudden change in the meteoric condition of the atmosphere, mechanical injury, or sudden or continued irritation from any cause; and these are sometimes more or less overlooked or disguised by other symptoms; thus, inverted eyelashes, tumours of the lid, or the intrusion of foreign bodies, may not be mentioned by the patient, and, unless sought for by the practitioner, may be entirely overlooked. There was a patient in the West of England Eye Infirmary who was admitted as an in-patient for very severe purulent ophthalmia, who had no suspicion of his disease depending on a mechanical cause. As he complained of severe pricking and pain in one particular spot at the reflection of the conjunctiva, from the upper lid to the globe, an examination was instituted, but from the swollen and vascular condition of parts nothing was discovered. About a week subsequently, as these same symptoms continued, and the disease augmented rather than decreased, a second and more careful examination was made, when, in the very situation of the patient's uneasiness, a long sharp beard of barley was discovered, covered by and hidden in a fold of tumefied membrane. On the removal of this foreign body the disease immediately assumed a favourable character, and the patient soon became quite well.

I recently attended a gentleman with a very acute form of this affection. He was of full habit and plethoric. The account he gave me of its occurrence was, that on a Saturday afternoon, in passing through Covent-garden market, he suddenly felt a peculiar sensation in his right eye, which was previously quite well, that the eye remained uncomfortable during the evening, but that the next morning it pained him so much, watered so profusely, and closed so involuntarily, that he was quite unable to use it at all. I found him with a hot skin, full, frequent pulse, and constipation. By a liberal application of leeches, an active calomel purge, and a tepid acetate of lead collyrium, he was cured of all the active symptoms in a few hours.

A milder form of the affection is what I have termed *partial* conjunctivitis. It commences in the conjunctiva of the lids, and ceasing to spread, it is confined to that situation, with the exception of a few inflamed trunks which

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which all the symptoms are essentially similar, but milder in character and slighter in degree. The symptoms are sometimes so trifling that the patient takes little or no notice of the affection, and merely says his eye is blood-shot.

† In some cases the vessels assume an atonic dilation after the active disease has passed off.

pass to the conjunctiva oculi. The lid appears slightly red and swollen externally, and on inverting it the lining is found of a scarlet colour, and loaded with reticulated prominent vessels.

Passive Acute Simple Conjunctivitis.—This variety of inflammation is frequently met with, although much less frequently than the preceding forms. It occurs in leucophlegmatic habits, in debilitated individuals, or in states of the constitution where the health is much deranged. It is less sudden in its approach, progresses more slowly, and lasts a longer period.

The disease, as in the active type, spreads from the lids to the cornea, and presents a similar distention of vessels, but contrasted the local phenomena differ greatly. The colour of the inflamed membrane, instead of being of a bright scarlet, is of a dark or purplish hue, and instead of giving the idea of increased activity of arterial and capillary circulation, it looks as if the blood stagnated in the relaxed and dilated vessels, and acquired a change to venous before it reached venous canals. The affected vessels are more tortuous, larger, and less numerous. The conjunctiva itself has an œdematous, relaxed, and sodden appearance, whilst there is but little increase in the lachrymal secretion, and little if any spasm in the orbicularis.

The patient complains of smarting and uneasiness in the superficial parts of the eye, and of roughness on moving it, but slightly of intolerance of light, whilst the sensation of sand is much less distinct than in the active form.

As the disease proceeds, it frequently causes much œdematous swelling of the lids, and sometimes extends to the cornea, where it is apt to occasion atonic ulcerations very difficult to heal, unless their true nature be understood. All the symptoms are usually aggravated by the horizontal position, a fact which should be borne in mind in all the inflammatory diseases of the eye.

The constitutional symptoms are those of derangement and depression, without inflammatory fever. Generally gastro-enteric disturbance, with pale, flabby tongue, and depression of spirits; the pulse feeble and soft, or full, and readily compressible; the feet are usually cold, and sometimes the general surface, denoting langour of circulation and diminished nervous energy.

The prognosis is favourable where the case is understood and properly treated; but if depleting measures only are had recourse to, its duration is very prolonged, and severe mischief may be done to the cornea before these injurious measures are remitted.

The predisposing causes are constitutional derangements in individuals whose vital powers are either for the time or naturally below par, especially if they have previously suffered from conjunctivitis. The exciting are similar to those usually engaged in the production of the active form; but the most common certainly are atmospheric vicissitudes, excessive employment, and exposure to partial currents of cold damp air. Many cases of the disease have originally been active, but by excessive depletions, anxiety of mind, and medicine, have degenerated in type, and finally require a complete change of regimen and medical measures.

Treatment.—I will, in the first place, discuss the appropriate plan of treating the active acute form, and, secondly, the passive acute type of conjunctivitis.

In that form which is confined to the lids simple measures are alone necessary. The patient should be careful in his diet and keep himself from damp and cold situations. On first seeing him it is advisable to order an active purgative—five grains of calomel, followed in two or three hours by a full dose of jalap, or the two remedies may be combined; at the same time he should bathe the lids freely, five or six times a day, with a weak tepid solution of the acetate of lead (ten grains to one scruple of the acetate to half a pint of distilled or rose-water), and allow a small quantity of the collyrium to flow between the eyelids.

In the more active and general form, prompt and decided measures are necessary. If the pulse be full and incompressible, decidedly hard, the skin hot, the patient plethoric and vigorous, I believe it is best to place him in the erect posture, and bleed him to incipient syncope from a full-sized aperture in the arm. Under these circumstances we are enabled to inspect the effects of general blood-letting on a local inflammation: the vessels, previously full and injected, become empty and apparently passive; the bright scarlet colour changes to a pale or whitish-pink; the irritability of the eye and the flow of tears is relieved; and the patient no longer complains of pain or intolerance of light. As reaction finally succeeds, the primary symptoms return in a greater or less extent, in proportion to the benefit wrought. In less active and urgent cases, cupping from the nucha, or the application of leeches around the eye, proportioned to the age, constitution, and strength of the patient, and the activity of the disease, will be sufficient. It may sometimes be necessary to follow up the venesection, in severe examples, by one or more applications of leeches, but such a necessity is rare. Bleeding from the temporal artery is quite unnecessary, and from the subsequent necessity of using tight bandages and compresses, and the fear of an aneurismal formation, it is injurious and culpable.

The effects of an active purge is always most salutary in this disease, as far as I have observed. It should be administered as soon as the patient is seen, and repeated if

its effects are not sufficiently great after some hours. The remedies selected should act on the gastro-intestinal and biliary secretions, as well as thoroughly clear out the alimentary contents. For this purpose a full dose of calomel with ipecacuanha or antimony should be administered, and its action promoted a few hours afterwards, or the next morning, by an active purge of jalap, either alone or in the following combination:—Powdered jalap, senna, and bitartrate of potassa, equal parts. The dose for an adult consists of two scruples, and is termed pulvis purgans at the West of England Eye Infirmary.

As regards local applications, warm or tepid fomentations, or collyria, are in general more agreeable to the feelings of the patient than cold ones. Weak solutions of the acetate of lead, ten to twenty grains of the acetate to half a pint of distilled water, I generally prefer; it gives much relief to the patient and lessens the vascular disturbance. Poppy fomentation is also a valuable application, although these remedies are of minor importance.

Blisters are rarely necessary in the active acute disease, but should the more acute symptoms be subdued, and the disease seem inclined to pass into a chronic stage, a blister behind the ear may be very valuable.

An important point to be attended to in all forms is the removal of any exciting cause, should one exist; such, for instance, as an inverted eyelash, a foreign body between the lids, &c., the diagnosis of which I have already mentioned. In some cases accumulated fecal matters, or obstinate hepatic, uterine, or gastro-enteric disturbance, may require especial attention, without which the local disease will not subside; but the ordinary symptoms of these affections must be consulted and an appropriate plan of treatment instituted.

In all cases an appropriate regimen should be adopted, the head kept sufficiently elevated, and a broad, deep, green shade, worn over the affected eye. Anything which keeps the head or eye hot and confined, as bandages, small close shades, &c., should be studiously avoided.

Treatment of Passive Acute Conjunctivitis.—As broad a difference is requisite in the treatment of these two affections as exists in their symptoms. Blood-letting is unnecessary and injurious, whilst a local astringent and general tonic plan of treatment is indicated. On first seeing a patient a blister may be directed, in general with advantage, behind the ear corresponding to the affected eye; a full dose of calomel with a grain of quinine administered, to be followed by an ounce of castor oil, or equal parts of rhubarb and sulphate of potass (ten to fifteen grains), with a few grains of ginger. As a local application to the lids and conjunctiva, I have found no remedy so efficacious as a weak solution of alum in distilled water.

In most instances, especially if ulceration of the cornea be present, the most remarkable benefit results from very lightly pencilling the *outside* of the eyelids with a stick of the nitrate of silver, passed over them once or twice with a light hand, or with a solution of the nitrate in distilled water. This practice is especially advantageous in strumous conjunctivitis, and for that section I shall reserve a fuller description of the best mode of its employment and indications.

Our general treatment must be nutritious and tonic; the diet carefully regulated, but containing a due proportion of animal food, whilst the exact condition of the health must regulate the administration of remedies. In some instances moderately full diet, with malt liquors, is amply sufficient to fulfil these indications; in other instances, quinine, with taraxacum, Plummer's pill, &c., may be necessary; and where the strength is greatly reduced, small doses of sulphate of zinc; finally, if there be a decided state of anæmia or deficiency of rich blood, iron—either the ammonio-citrate or tartrate, &c.

I may state that these measures are to be employed in a modified degree in those cases where active general and local symptoms have subsided, and the inflamed vessels remain distended, as if from loss of tone—either an astringed collyrium or a single application of the nitrate of silver to the external skin of the eyelids.

Chronic Simple Conjunctivitis.

Active Type.—In this section it is not my intention to describe the chronic forms of disease which may result from the gradual subsidence of the acute varieties of conjunctivitis, but to confine myself to those which are from their commencement similar in character.

This form of conjunctivitis is mainly confined to the adult, and presents a much less degree of vascularity than the acute disease. The eye presents a red, vascular, or blood-shot appearance, which is found to depend, on a close inspection, on a number of large, tortuous, dilated conjunctival vessels, which, as they approach the cornea, terminate in a lash of smaller ramifications, ending abruptly at the cornea, when that tunic is unaffected. Their colour is a dull-red, approaching to brick-dust, and much less vivid than in the acute variety. The eyes water on the least excitement, and the vascularity varies in amount at various parts of the day, and from changes of weather, diet, &c. The lids, also, are similarly affected.

The patient complains of uneasiness, stiffness, "sticking," and sensation of sand in the eye. In most instances the light is offensive, and the symptoms are increased by exposure. The enlarged trunks impart a

very distressing feeling of roughness or sand between the lids when the eyes are moved. The disease may exist for a very considerable length of time; and if the predisposing and exciting causes be not removed, it increases in severity, and is apt to extend to the conjunctival covering of the cornea, which is rendered vascular and nebulous, and sometimes originates irregular ulcerations.

The disease affects both eyes, and the idiopathic forms are, I believe, invariably dependent on constitutional causes. I have seen several cases which evidently depended on excessive snuff-taking, full habits, and a tendency to cerebral congestion. In many instances it accompanies or follows other diseases of the eye, as iritis, choriditis, and retinitis, and in such instances I have generally made it a distinct item of treatment, partly to amuse the patient and partly from the benefit really derived by so doing. The chronic conjunctivitis arising from granular lids, inverted eyelashes, entropium, &c., I shall have to speak of separately.

The constitutional symptoms are generally connected with the vascular, digestive, and excreting functions. The blood seems to be inordinately rich in some patients, and more or less contaminated; the pulse is full, and harder than natural; the skin acts imperfectly, or partially; the majority of the secretions may be deranged, and in most patients we find the tongue foul, the bowels confined, and the stomach or liver out of order. These states of health precede the local disease, and predispose or excite its invasion, and hence are not sympathetic of the inflammation.

The predisposing causes, then, are the states of health I have mentioned, without which I do not remember seeing any patient affected with the disease. The exciting causes are an excess in snuff, excessive employment of the eyes in reading, mechanical occupations requiring careful attention, especially if carried on by artificial light. I attended a gentleman with this disease, who was much out of health, who attributed the ophthalmic affection to constant exposure to dust in his superintendence of some extensive mills. It is also excited by other diseases of the eye. A very obstinate case was under my care in the spring, summer, and autumn of 1842, which came on in this way. It followed, in this case, a severe attack of syphilitic iritis; the iritis was perfectly cured, but the health suffered from depletion, mercury, and some remaining symptoms of syphilis. The conjunctivitis finally yielded, most satisfactorily, on the improvement of the health.

Under the head of *diagnosis* I would state that in all cases the lids should be examined, in order to determine whether they are or are not granular, and that a careful inspection should be instituted by holding the lid some little distance from the eye, in order to detect any misplaced eyelashes, which are sometimes extremely fine and light-coloured, and not readily seen.

A partial form of this disease, confined to the palpebral conjunctiva, is known by the name of psorophthalmia. The lid is red and the conjunctiva traversed by several fine scarlet vessels. The patient complains of much irritation, pricking, and itching of the lining membrane of the lids, and occasionally of adhesion of the eyelids in the morning, on first awaking, from a glutinous mucous secretion during the night. The eyes are, to use the patient's expression, "weak," so that he is unable to employ them as before. It affects both eyes, and is apt to endure for several months. Many of these patients overwork their eyes on small objects, such as females in needlework, &c., and hence the exciting cause remains, whilst the general health is mostly affected. The disease is dissimilar to, and has no connection with, tinea and lippitudo, as I shall hereafter explain.

Passive Chronic Simple Conjunctivitis affects pale and cachectic subjects, whose general health is not only deranged, but whose vital powers are depressed. The lids, in these examples, are pale externally, smooth, and shining, becoming especially so from any increased irritation. The conjunctiva presents a glossy relaxed appearance, and is traversed by a number of vessels, more numerous, and the majority smaller, than in the active form; they are of a pale leaden colour, and seem to change their contained blood very slowly and imperfectly. A layer of watery mucus covers the conjunctiva, which is apt to dry in the night and cause the lids to adhere in the morning. I have seen this condition combined with ulcers of the palpebral conjunctiva almost as frequently as alone. We learn from the patient that his eyes do not pain him much, but that they occasion him constant annoyance; that the affection renders his powers of vision very defective, and that he has generally to soak the eyelashes with warm water before he can open them of a morning.

The disease attacks both eyes, and remains, with various remissions, relapses, and improvements, for several months under the ordinary plans of treatment.

The constitutional symptoms precede the local ophthalmia, and consist, usually, of general debility, sallowness and palor, deficiency of tone in the soft parts, a feeble soft pulse, indigestion, imperfect action of the liver, and constipation. The tongue is pale, moist, flabby, and marked by the teeth; the skin pale and chilly; the perspiration abundant and cold; whilst the patient may or may not complain of giddiness, or other head-symptoms. In some cases all these symptoms are present, whilst in others some or nearly all may be absent.

Treatment.—In these various forms the indications for treatment are twofold: to cure the local affection, and secondly, to improve the constitutional health.

In the *active* disease, where the system seems inordinately full, and the head suffers from congestion, cupping from the back of the neck, repeated according to circumstances, is highly beneficial. In ordinary cases, however, this is unnecessary, and the best mode of cure is to blacken slightly the outside of the lids with the nitrate of silver at intervals of from four days to a week. Should the lids adhere in the morning, it is well to employ a small portion of the unguentum hydrargyri nitrico-oxydi, about the size of a pin's head, liquefied by holding it near the candle, every night on going to bed, anointing the edges of the lids with the ointment. If the nitrate of silver be not employed, it is best treated locally by moderately strong solutions of the acetate of lead (three or four grains to the ounce of rose-water) or alum, alternated with a collyrium formed of equal parts of wine of opium and water, and in obstinate cases by the application of one or more blisters to the back of the neck or behind the ears.

The constitutional treatment which I have seen and found most efficacious is moderate and continued purgation by the compound colocynth pill, with or without one-eighth of a grain of the potassio-tartrate of antimony, a steady use of the compound calomel pill, five grains every night, and an occasional warm-bath, followed by brisk friction of the skin. The diet must be moderate in quantity, carefully selected and well masticated, and the patient should take daily exercise to the avoidance of fatigue. In the female it is necessary to pay attention to the state of the uterus, and in all cases to treat any particular disturbance which may exist in any organ.

In *passive* cases the lotions I have previously mentioned are beneficial, when frequently applied to the conjunctiva and lids, and the red ointment (nit. oxyd.) should be also employed at night. The external application of the nitrate of silver in substance is apt to produce much œdema of the lids, especially in thin-skinned, delicate persons. It is best, therefore, to paint the skin of the eyelids over once with a solution of about six grains to the ounce of water, by means of a camel's-hair brush. In a passive case, occurring in a large leucophlegmatic man, whom I treated by applying the nitrate in substance to the outside of the eyelids, it produced very severe effects. The cuticle came off in white flakes, the lids swelled to a great extent, so that he could not open his eyes for about thirty-six hours, and it occasioned him very considerable pain. In about three days, however, all these symptoms passed off, and proved also a perfect cure to the original affection.

These cases almost always demand the use of tonics and nutritious diet. Five grains of the aloes and myrrh pill, with a grain of quinine or sulphate of zinc every night, as a tonic purge, and some mild bitter with the mineral acids, two or three times a day, with or without the compound tincture of cardamoms. Sponging the surface freely with tepid water every day or every other day, and exciting the skin by means of a coarse towel or the flesh-brush, is in many cases highly beneficial. If the secretion of the liver be much deranged or deficient, the soft extract of taraxacum, in doses of a tea-spoonful, two or three times a day, is sometimes successful, and in these cases the inspissated ox-bile, in doses of five grains three times a day, deserves a careful trial.

(To be continued.)

EXHALATION OF CARBONIC ACID FROM THE BODY.

Professor Scharling, of Copenhagen, recently made some experiments to ascertain the quantity of carbonic acid exhaled from the human frame by the lungs and surface of the skin in twenty-four hours. The method he employed was the following:—

The subjects of experiment were confined in an air-tight box, wherein they were perfectly at ease, being enabled to speak, eat, sleep, or read, without inconvenience; a constant current of atmospheric air was admitted into the box, and the deteriorated gases abstracted by means of an air-pump. The air withdrawn was conducted into a proper arrangement of bottles, some containing sulphuric acid, others a solution of caustic potash. The quantity of carbonic acid, both previously and subsequent to each operation, was carefully ascertained by being received into three graduated tubes. The results were as follows:—

The professor himself, aged thirty-five years, exhaled 219 grammes (or 7.7 ounces avoird.) during twenty-four hours, seven of which were spent in sleep; a soldier, twenty-eight years of age, exhaled 339.728 grammes (8.45 ounces); a lad of sixteen, 234.379 grammes (7.9 ounces); a young woman, aged nineteen, 165.347 grammes (5.83 ounces); a boy, nine and a half years old, 133.126 grammes (4.69 ounces); a girl, ten years old), 125.42 grammes (4.42 ounces). In the two last the period allotted to sleep was nine hours.

From these experiments Professor Scharling deduces, that males exhale more carbonic acid than females, and children comparatively more than adults. He also finds that less of the gas is given off during the night than during the day, and that in certain cases of disease, which he does not specify, less carbonic acid is formed than during the healthy state.—*Phil. Mag.*

STATISTICS OF EPILEPSY;

CALCULATED TO AFFORD DATA FOR THE TREATMENT OF THAT DISEASE.

M. Leuret, principal physician of the Bicêtre, has published in the "Archives Gen. de Med." for May last, an essay on the above-named disease, in which the following results are stated:—Of one hundred and six patients of all ages, fourteen experienced their first attack of epilepsy before five years of age; five between the ages of five and ten years; twenty-four between ten and fifteen; eighteen between fifteen and twenty; sixteen between twenty and twenty-five; eight between twenty-five and thirty; four from thirty to thirty-five years of age; three from thirty-five to forty; two from forty to forty-five; five from forty-five to fifty; and one only after fifty years of age. Adolescence would, therefore, seem to be the period which furnishes the greatest number of epileptic patients, and next to it the period of youth. As very young infants, however, are seldom sent to the Bicêtre, this result cannot be pronounced on with certainty; and M. Leuret is of opinion that epilepsy is relatively much more frequent in children under five years than the above statement implies. Of the same one hundred and six patients there were but seven in whom the disease could be readily traced to exist in other members of their immediate families,—of one, the father, a brother, and two sisters were epileptic; of a second, the father only; of the third, the mother and a sister; of the fourth, the mother and an uncle; of the fifth and sixth the mother only; and of the seventh an uncle. M. Leuret endeavoured to ascertain, if the immediate relations of the patients had been subject to other affections of the brain or nervous system, but found this to be the case in no more than eight instances, in three of which some of the patient's near relations had been affected with insanity; two cases had died of apoplexy; and the other instances were subjects of paralysis, or acute meningitis, or had committed suicide. From these data M. Leuret conceives the doctrine of the hereditary nature of epilepsy to be fairly open to doubt.

Workers in white-lead factories appeared to be peculiarly obnoxious to attacks of epilepsy. Among the fore-named one hundred and six patients, the following peculiarities had been noticed:—Thirty had been addicted to drunkenness, twenty-four were of an irascible disposition, and a similar number given to onanism, and fifteen to sexual indulgence; seventeen were of a mild and amiable disposition, sixteen of a timorous, and the same number of an obstinate character; seven of a depraved tendency, and three gamblers. The disease had appeared in ten of the patients subsequently to attacks of small-pox, in eight after syphilis, in five after various fevers, in four after itch, &c.; but in saying this, it is not asserted that these diseases had any direct influence in the production of epilepsy. In the larger number of cases, terror would appear to have been the proximate cause of the access of the disease.

Of the one hundred and six epileptics, thirty were accustomed to have fits every fortnight, seventeen every month, thirteen every week, nine every three or four days, four almost every day, two daily, one every two months, three every three months, one every eight or nine months, one every year, one had had ten attacks in four years, and twenty-four were subject to them at variable epochs. It is seldom that, when the epoch of attack arrives the patient has but a single fit; in most cases three, four, or more were found successively to follow. "I have seen (says M. Leuret), but only in the most severe cases, and which often speedily prove mortal, a patient the subject of *eighty fits in the space of twelve hours!* The patients recovered from one only to fall into another, and neither had intervals of sleep or of consciousness."

Of thirty-three patients seventeen experienced this; the disease went on increasing in intensity; in sixteen this progressively diminished. Of one hundred and one cases, in thirty-five the attacks came on principally in the night; in twenty-nine, indifferently in the night and day; in twelve, in the daytime; in eight, during the day alone; in eight, in the night alone; in three principally, in other three always, in the morning; and in the evening only, or in the morning and evening only, in three others. Night appears, therefore, to be eminently the period most favourable to epileptic attacks. M. Leuret conceived that this might be partially owing to the horizontal posture at that period, and he accordingly recommended wakefulness and exercise to the patients at the hour when they were liable to the access; some, though not all, found this advice available in warding off the fits. As an instance in favour of the influence of the horizontal posture in the production of epileptic attacks, the case is cited of a youth who had been liable to night fits, but had been observed never to be the subject of these when he travelled in a vehicle at night, being then obliged to sleep in a sitting attitude.

The number of fits in the year varied in M. Leuret's patients from eight to two thousand one hundred and forty-nine. The relative proportion of liability to attacks in different months of the year, as observed in seventy patients, is represented in the following table:—

Months of Thirty Days.	Average of Cases Daily.
January	15.6
February	17.1

March	14.6
April	13.5
May	14.2
June	13.3
July	15.4
August	12.0
September	14.4
October	12.9
November	15.2
December	14.1

The average of May or September will best represent the mean average of the year. As a general rule, attacks are most frequent in the winter and autumn, and least so in the spring and summer. As respects the probable influence of lunar changes on the production of epileptic fits, the following table will display the average of the fits taking place daily during both the wax and the wane of the moon:—

Months.	Average of Daily Cases. Wax of Moon.	Wane of Moon.	
Aug.—Sept. 1840..	14.8	15.2	+
Sept.—Oct.	12.3	13.7	+
Oct.—Nov.	13.6	15.8	+
Nov.—Dec.	15.1	13.2	—
Dec.—Jan. 1841 ..	13.6	17.2	+
Jan.—Feb.	16.2	15.4	—
Feb.—Mar.	17.1	15.2	—
Mar.—Apr.	14.	13.4	—
April—May	14.3	14.7	+
May—June	12.	13.7	+
June—July	13.3	13.2	—
July—Aug.	16.5	10.7	—

The mark + indicates the predominance in number of the fits during the wane of the moon in the several months on the same lines, the mark — their greater predominance during the increase of the moon in the months opposite thereto.

M. Leuret concludes from the above table, &c., that the moon exerts no obvious influence on epileptics; or, if any conclusion be drawn, it may be that the new moon, contrary to the popular notion, exercises a salutary influence, fits being then rather less frequent than at other periods.

The electric state of the atmosphere is not without its influence on epileptics. Stormy weather predisposes to attacks, but the most powerful predisponent is certainly intemperance, and many patients have owed their recovery to an abandonment of previous intemperate habits. "Erotic impulses about the time of a fit are, in certain cases, altogether immoderate, and the patients, while destitute of consciousness, and only capable of instinctive actions, sometimes abandon themselves, without control, to the act of masturbation. Si, par des liens, si, à l'aide de la camisole, on leur tient les mains éloignées du corps, ils exécutent des mouvements du bassin, et tiennent en même temps des propos qui rendent manifestes, je ne dois pas dire les désirs, mais les besoins impérieux auxquels ils sont en proie. The deed is, in reality, at this time neither a passion or a vice,—*it is an organic action dependent on epilepsy.* J'ai vu de jeunes garçons, sages, du moins en apparence, dociles, d'une réserve parfaite, qui, dans l'intervalle d'attaques rapprochées, étaient pris d'un délire érotique qu'ils exprimaient et par leurs discours et par les mouvements de leur corps. On ne pouvait pas s'approcher d'eux, leur tâter le pouls, leur toucher le front, sans que ce simple contact ne fût reçu par eux comme une caresse."

LITHOTOMY ON A DOG.

A NEWFOUNDLAND dog had been unwell for a long time, having no appetite, and being much emaciated. The urine was constantly dribbling away, and excoriating the thighs, and yet there was great difficulty in evacuating wholly the contents of the bladder, which, in a slight degree, were tinged with blood, and showed a sacculous deposit. It was suspected by Mr. Mather (vet. surg.) of Edinburgh, that a calculus was present, and, having obtained permission, he determined to operate in consequence. The dog was properly secured with webbing, and placed in a fit position. A syringeful of tepid water was injected up the urethra, and a very small whalebone staff introduced along that canal into the bladder. This done, the curvature of the urethra in the perineum was cut down upon, and the staff then withdrawn. With a bistoury, Mr. Mather enlarged the opening already made, and next carried the incision to the pelvic portion of the urethra and neck of the bladder, the back of the bistoury being placed against the index-finger of the left hand, which was introduced as a director. Room sufficient was now obtained, and the forceps was accordingly introduced into the bladder, and a calculus seized at its long axis, and drawn out after much difficulty. when it was seen to be of an oblong, flattened form, and as large as a duck's egg! By means of a sound, several other small stones were felt, and immediately extracted. The parts were then cleansed with a little tepid water, and the dog was released from his situation, and made as comfortable as circumstances would admit. The loss of blood had been trifling in the operation, and no ligatures to vessels had been necessary; but the poor animal was much exhausted, and its constitution had been already so much weakened by disease, that the dog progressively sank and died the same evening. On examination after death several more and smaller calculi were discovered in the bladder. The coats of that organ were a little thickened, and the ureters enlarged; but no damage seemed to have resulted to the surrounding parts during the operation.—*Mr. Mather, in Veterinarian* for August.

ANALYSIS OF THE MILK OF THE COW, AND OF HUMAN MILK.

INORGANIC CONSTITUENTS OF MILK. CASEIN PROBABLY OWES ITS SOLUBILITY TO CONNECTION WITH AN ALKALI REMOVED IN ARTIFICIAL COAGULATION. SALTS FOUND IN MILK.

THE discrepancies between the results of the analyses performed by Pfaff, Schwartz, and Meggenhofen on the latter, and those of Berzelius on the former of these substances, induced Dr. Haidlen, under the direction of Liebig, to undertake new researches upon the subject, of which the following is an abstract:—

Dr. Haidlen operated on pure and quite fresh cow's milk. Of eight cases he found the reaction of milk slightly alkaline in seven, and acid in one; the last was obtained from a cow which had been ill a short time before. He first incinerated a portion of the milk, in order to arrive at a general knowledge of its inorganic principles, and he found in the ashes, conformably with other analyses, chlorine, phosphoric acid, carbonic acid, and a small quantity of sulphuric acid, in combination with potassa, soda, lime, magnesia, and oxide of iron; he easily demonstrated, in the serum of milk, coagulated by acetic acid, besides the presence of the bases which have just been mentioned, the existence of chlorine and phosphoric acid, but he never could detect sulphuric acid in it; it must, therefore, be regarded as a product of the oxidation of the sulphur contained in the casein. As regards the carbonic acid, its presence, always observed in the ashes of milk, is indicated in most analyses as arising from a lactate supposed to exist in this liquid (lactate of soda). Haidlen has arrived at this result, that normal milk does not contain lactic acid, but that the formation of this acid commences immediately after it is drawn from the cow, and in some cases even in the animal, and that it then produces the acid reaction of milk: he has seen, moreover, that this liquid contains a quantity of phosphoric acid precisely corresponding to the lime and magnesia which it contains.

If milk be coagulated by acetic acid, and if the serum be evaporated to dryness, and afterwards treated by alcohol, by the evaporation of the alcoholic solution and calcination of the residue, a mixture of salts is obtained which, dissolved in water, has a strongly alkaline reaction, and which, by the addition of acids, disengages carbonic acid; it is formed of alkaline carbonate, chloride of sodium, and chloride of potassium. Now, as normal milk does not contain lactic acid, with which this alkali removed by acetic acid can be combined, it would be very natural to conclude that it was in combination with the casein; and in favour of this opinion is the circumstance, that pure caseïn is but very sparingly soluble in water, out of proportion with the quantity of this substance which milk contains; that, on the contrary, an extremely slight addition of soda or potassa is sufficient immediately to dissolve it, and that, not only do the alkalies exert this action on pure caseïn, but also that a very small quantity of alkali dissolves with the greatest facility a mixture of caseïn and phosphate of lime.

If it be admitted, as all circumstances authorise, that the pretended soluble modification of caseïn, contained in recent milk, is nothing more than a combination of caseïn with an alkali, the phenomena of the coagulation of milk are explained in a simple and satisfactory manner. The action of the acids, as well as of the earthy and metallic salts, then, consists of a simple decomposition of the combination of casein. In the first case, free caseïn is obtained; in the second, an insoluble combination of this substance with the base of the salt which has operated the coagulation. This view, also, presents to us the best explanation of the coagulation of milk by rennet. According to the observation of M. Pelouze, the immediate consequence of the action of the mucous membrane of the stomach on an aqueous solution of sugar of milk is a conversion of the latter, the principal product of which is lactic acid. Now if, setting out from the moment when, under the influence of favourable external conditions, the rennet is in contact with the milk, lactic acid is formed, the period soon arrives (as the quantity of alkali combined with the caseïn is very small, 42 to 45 milligrammes in 100 grammes of milk) when the lactic acid formed is sufficient to saturate this alkali, and to separate the caseïn at a higher temperature. The analysis of Scherer, fully confirmed by those of Rochleder, has demonstrated that, in the coagulation of milk by an acid, the latter does not form any combination with the caseïn.

The salts of the cow's milk are, according to the above,—

Phosphates of lime, magnesia, and iron; chlorides of potassium and sodium; besides a combination of an alkali (soda) with caseïn.

Dr. Haidlen found in 100 parts of milk from two cows,—

	I.	II.
Phosphate of lime	0.231	0.344
Phosphate of magnesia...	0.042	0.064
Phosphate of iron	0.007	0.007
Chloride of potassium	0.144	0.183
Chloride of sodium	0.024	0.034
Soda	0.042	0.045
	0.490	0.677

It is not surprising that the quantity of salts contained in No. II. exceeds by more than one-fourth that of No. I., when we re-

flect on the great number of circumstances which may modify the concentration of milk; it is, on the contrary, interesting to have found in two different cows the same salts in perfectly similar relative quantities.

One hundred parts of cow's milk were found to contain—

Butter	3.0
Sugar of milk and soluble salts	4.6
Caseïn and insoluble salts	5.1
	12.7

Human milk, which Haidlen examined with relation to its proportion of butter, sugar of milk, and caseïn, had a very strongly alkaline reaction, and it was coagulated with difficulty by sulphate of lime.

No. I., of very good appearance, gave in 100 parts 10.8 of residue, which was formed of—

Butter	3.4
Sugar of milk	4.3
Caseïn	3.1
	10.8

No. II. at once announced, by its aqueous appearance, its poverty in fixed principles. 100 parts gave 7.2 of residue, which contained—

Butter	1.3
Sugar of milk	3.2
Caseïn	2.7
	7.2

Annalen des Chem. and Pharm., quoted in *The Chemist.*

ANTAGONISM OF GOITRE AND TUBERCLE.

According to Escherich, a Bavarian physician, goître is incompatible with tubercular phthisis; and he regards as a wicked attempt (sic) the endeavour to remove goître in subjects who otherwise would be (?) constitutionally predisposed to consumption. For four years he has had under his care a woman, with a cavern in the upper lobe of the right lung, and pectoriloquy with habitual cough and expectoration; yet this patient has remained in a stationary condition during the period stated, which the doctor considers to be due to the conjoint presence of a large goître, adding that he had never known a patient affected with the latter disease to die of phthisis. Other physicians in the mountainous regions of Styria and the Tyrol have made similar statements.—*Med. Corresp. Blatt. bayerische, &c.*

We see clearly that *glanders* is essentially a disease of the respiratory organs, though other parts may become implicated during its progress. We see, also, that *farcy* is an affection of the glands and absorbents.—*Veterinarian.*

REMARKABLE CASE OF

PUS-CONCRETIONS,

WITH AN EXPLANATION OF THEIR

MODE OF FORMATION.

By Erasmus Wilson, Esq., Surgeon, London.

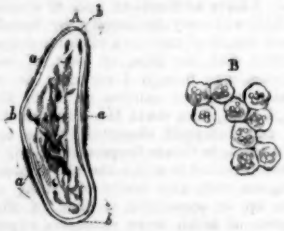
My attention was lately attracted by the perusal, in the last number of the "Veterinary Transactions," of a case which had occurred in the practice of Mr. Daws, of 255, Oxford-street, and Rathbone-place, and was laid before the Veterinary Association by Mr. Hunt. The pathological phenomena attending this case are peculiar; and no parallel case, as far as I am aware, has yet occurred in the human subject or the horse, although there can be no reason why such should not be. In anticipation of an event of this kind, I will briefly detail the history of the patient and the observations which I have since made through the kindness of Mr. Daws, on the products of the disease. It may be further necessary to remark, on the authority of Mr. Daws, that the case is unique in the horse.

In January, 1842, a gentleman purchased a horse, which was shortly afterwards attacked with *strangles*, and placed under the care of Mr. Daws. A slight enlargement was apparent near the angle of the lower jaw, which disappeared under stimulating treatment. The horse continued at work for six months, when a soft fluctuating tumour was perceived between the angle of the jaw and the larynx on the left side, and when the tumour was pressed some healthy pus escaped through the left nostril. It was now evident that there was a large abscess in the situation referred to, and that as frequently as it become distended, relief was obtained by the spontaneous escape of part of its contents through the nose. A blister was applied four or five times over the tumour, but with no result, and Mr. Daws came to the resolution of opening the abscess in a depending situation, an operation that was performed in February last by Mr. Hunt.

When the abscess was cut into, about three pints of pus escaped, and with it between three and four hundred irregularly shaped, flattened bodies, of a yellowish colour and various size. In general aspect these bodies bore a close resemblance to broad beans, and many were equal in diameter to a broad bean of the largest size, none being smaller than a common horse-bean. They were believed to be masses of concreted pus; the borders and angles were rounded and polished, as were any prominences on their surface, whilst their flat sides presented a very slight concavity, which was roughened by a whitish deposit of granular albumen. Their weight was twenty ounces.

When divided with a knife, the pus-concretions were found to possess the density of moderately tough cheese. The centre of the section was cream-coloured, homogeneous, tough, and somewhat loose in texture, but the exterior was yellow, dense, firm, semi-transparent, and even horny; indeed, there was a distinct, semi-transparent, horny pellicle surrounding each concretion.

Upon examination with the microscope I find the central part of these concretions to be composed of pus-corpuscles, very closely aggregated. From having been kept in spirit of turpentine and compressed the corpuscles are irregular in their outline, and measure somewhat less than the ordinary diameter of the pus-corpuscle, viz., 1-3300th of an inch, while the measurement of the corpuscle of fresh pus, according to my observations, varies from 1-3000th to 1-2500th of an inch.



A. Section of one of the larger concretions drawn to the natural size. The granular deposit of albumen is seen at *a*, *a*, *a*, and the laminated texture of the pellicle of the concretion is also best seen in this situation, *b*, *b*, *b*. The borders and projecting eminences of the concretion rounded and polished.

B. A group of pus-corpuscles as they appeared with the microscope.

The cortical part of the concretions is too closely condensed to give any satisfactory results when examined with the microscope. But the white albuminous deposit on the surface is distinctly granular.

We have next to inquire, How these concretions have been formed? The explanation which I should give, in answer to this question, is as follows:—The case was originally one of ordinary abscess, which disappeared under treatment. Now, this I regard as the period when the pus, from having been fluid, became inspissated and laminated by the absorption of its fluid portion, the liquor puris.

Subsequently, a purulent secretion is reproduced, the new secretion containing an excess of albumen dissolved in its liquor puris. The effect of the new secretion I imagine to have been the breaking up of the inspissated and laminated pus and its impregnation with albumen.

In a third period, the broken fragments floating in the purulent fluid and constantly rubbing against each other, obtained the rounded form which their angles presented, and the general smooth polish of their exterior. The latter effect must have been a consequence of the cohesion of the purulent matter produced by the albumen with which it was saturated, otherwise we cannot suppose the purulent concretions to have obtained the solidity which they really possess.

The granular albumen deposited on the protected surfaces of the concretions is a subsequent formation.

I need scarcely refer to the physical agencies that must have assisted in the above processes,—for example, the use of counter-irritants, the disturbance of the contents of the sac caused by currying the animal and handling the tumour, the pressure of the harness, and the active exertions made by the creature during the six months work that intervened between the disappearance of the first tumour and the opening of the second.

PHLEGMASIA DOLENS, OR BUCNEMIA.

To the Editor of THE LANCET.

SIR,—I have read with pleasure your extract from the Paris journals upon the above very interesting malady; and, perhaps, you will allow me a corner in your widely-circulated hebdomadal publication to observe that I agree with the French, and may add, also, with some American and British practitioners, in opinion that it is not confined to parturient females alone, having myself seen two unquestionable cases in the male subject, each of which was successfully treated by calomel purges, saline antimonial mixtures, leeches to the groin, and evaporating lotions, carefully and repeatedly applied, through the medium of an interrupted bandage to the entire surface of the greatly enlarged limb. When I began practice in 1816, I regarded and treated phlegmasia dolens as an inflammatory disease, and considered it one always affecting the local lymphatics, but subsequent experience and careful observation have convinced me that the more modern pathology of Drs. Davis, Lee, and others, as to its seat, is generally correct, and that inflammation of the pelvic or femoral veins is most frequently the cause of the complaint; as, however, I have not been unfortunate enough to see a case terminate fatally, it has not been in my power to confirm this view of its cause by post-mortem investigation. I am, Sir, your obedient servant,

G. YEATES HUNTER, Surgeon.

Margate, August 12, 1843.

SUGAR is certainly formed *in the stomach* in diabetes.—*Dr. Percy.*

EMPLOYMENT OF BLISTERS IN THE DISEASES OF YOUNG CHILDREN.

To the Editor of THE LANCET.

SIR,—I trust I shall not be considered as arrogating too much to myself if I again trouble you (see page 671) with a few lines in explaining still further my views upon the subject of blistering young children; but before doing which I must state that I cannot for a moment presume to set my judgment upon an equality with that of the lamented father of Dr. J. H. Davis, though my experience certainly will not permit me, consistently with truth, to forego my opinion or recant the observations you were kind enough to insert in the number of your valuable Journal for August 5th.

Feeling perfectly assured that Dr. J. H. Davis, in his letters, has fairly and openly expressed the convictions of his mind upon this topic, I am not (in making the few following remarks) influenced by the remotest wish to throw any discredit upon his practice, nor to underrate, in the slightest possible degree, the value of those excellent rules prescribed by his late father, which are highly estimated, and very justly so, by himself. Dr. Davis says, in speaking of sloughing after the application of blisters (p. 693), "that of the instances of sloughing which I have met with after the application of blisters, not in one case did that accident occur where it could not be most distinctly traced to neglect of one or more of the several conditions which should be observed, and which, if carefully attended to, will yield similar success in the practice of others." Granting (which I may freely do) that the mode recommended by the late Dr. Davis, of applying the dressings to the blistered surface, is excellent, I must, at the same time, maintain my former opinion, with all due deference, that in the three cases I mentioned in my last communication every necessary precaution had been taken, though without avail. Again, Dr. D. writes,—"With regard to the acute and sthenic inflammatory diseases of young children, to which my remarks more especially apply, the event of sloughing, agreeably to my experience, supported by that of my late father, may be prevented." I cannot, of course, deny this, as far as the cases that have come under the cognisance of that gentleman are concerned, though from what I have seen I must join issue with him upon this point, in respect of EVERY *case*. The practice I have usually adopted in applying dressings to the blistered surface differs somewhat from that employed by Dr. Davis. I seldom order a large blister to the chests of children, and therefore only one piece of linen is required, which I direct to be rather larger than the part affected, and to be spread with the ceretam cetacei of the present London Pharmacopœia, and to guard against wrinkling and consequent irritation, which is very prejudicial, effectually secure it by some strips of adhesive or isinglass plaster, which I think has an advantage over a firmly-applied linen band, as it does not, in any degree, confine the muscular movements of the chest, a very important point in the inflammatory affections of the respiratory organs.

Within the last week the case of an infant, three months old, has come under my notice, in which the remark of Mr. Houlton was illustrated; a blister was applied for *one* hour by the parent without having had advice; I was attending another child in the same house at the time, and the mother of the infant was induced to have recourse to a poultice after its removal, in consequence of my directions to the nurse of my patient, which, in a few hours, produced ample vesication. I have no doubt an hour or an hour and a half will very frequently be found a sufficient length of time for a blister to remain in contact with the skin, at least, of very young children; though I certainly do not generally carry my caution quite to that extent, I shall, from what Mr. Houlton has stated and I myself observed in the case above quoted, in future frequently do so.

I have been led to make the above observations, not with any desire of setting my opinion up in opposition to that of other gentlemen of much more extensive experience, nor with any invidious or improper feeling towards that gentleman with whose opinions mine do not exactly coincide, but merely for the elucidation of truth, and to induce the cautious and careful employment of a remedy of great power and value, but from which I cannot entirely disconnect, in my own mind, the idea of dangerous consequences. And the only way in which we can hope to forward the humane desire of giving the greatest possible relief by any given remedy is by free and unbiassed discussion, and by laying before our professional brethren the various results of our separate experience; and here I may, in conclusion, remark that you, in your editorial capacity, by forwarding this object in permitting us to express our sentiments in your pages, are conferring a lasting benefit as well upon society in general as the members of our profession. And believe me to remain, Sir, your obedient servant,

P. L. BURCHELL, M.R.C.S.,
Surgeon-Accoucheur to the Royal Maternity Charity.

Kingsland-road, August 14, 1843.

P.S. Since writing the above, I have been asked by a friend why, if I saw a disposition to sloughing in one or two of those three children in the same family referred to in my former letter, I persisted in applying a

blister to the third? As this question may have occurred to others of your readers, I may as well, in reply, state that I had no opportunity of using any discretion from that indication, as the blisters were applied upon all simultaneously.

CONTINENTAL TREATMENT OF NEURALGIA.

Dr. Schleiser, of Peitz, has prescribed, with success, to patients with abdominal neuralgia, but whose circumstances would not permit of their visiting a watering-place, the use of an artificial mineral water, resembling that of Eger, in Bohemia, and made as follows:—℞. *Filtered spring-water*, a pint; *diluted sulphuric acid*, two drachms and a half; *hydrochloric acid*, twenty drops. Mix, and add *bicarbonate of soda*, forty-five grains. The bottles are then to be sealed up without delay, and kept cool; one or two pints may be drunk daily. In hepatic neuralgia Dr. Schleiser depends much on the effects of belladonna; in cases where great irritability of the stomach is present, he finds nitrate of silver suitable, combined with morphia.—*Rust's Magazin.*

Morphia has been an ordinary remedy for neuralgia, the cure of which it may, in certain cases, effect; but a French practitioner, M. Rougier, has advised the adoption of an ingenious method, which he says will prove the completeness and permanence of the cure. After the apparent removal of the disease by the morphia, he administers successive small doses of strychnia, gradually increasing the amount of the doses and abridging the intervals between them. Now, if the cure have been complete, the tremors and other characteristic effects of the strychnia go on diminishing in intensity from the first, notwithstanding the increasing strength and frequency of the doses; but if otherwise a contrary result happens, and the effects of the strychnia increase in intensity.—*L'Experience.*

ADVANTAGE OF SYSTEM IN MEDICAL INQUIRIES.

"I advise a systematic arrangement in each case; observe the state of the pulse and skin; feel the head (in insane patients), whether it is hot all over, or in one part only; whether the extremities are cold; whether the tongue is loaded and dry: whether the bowels are open, the urine free, and if the patient be a female, whether the catamenia are regular. Next observe the breathing and the action of the heart, pass your hand over the right hypochondrium, and feel whether the liver be enlarged, or whether the abdomen be distended with flatus, and whether there be tenderness about the precordia. Examine also the beating of the carotids and the temporal arteries."—*Dr. Sutherland.*

THEORY OF GENERATION.

To the Editor of The Lancet.

Sir,—My attention having been drawn to the strong analogy which subsists between the generative organs and function in the two great tribes of organised beings, I determined to make the theory of generation the subject of a Thesis presented at the M.D. examination of 1841, in the University of London. Circumstances having prevented the publication of the essay, I transmit you the conclusions deduced from the whole of the materials I could collect during a diligent investigation of the subject. I am, Sir, your obedient servant,

Ph. B. Ayres, M.D.

Thame, Aug. 12, 1843.

1. That the same general laws of reproduction obtain in all organised beings.

2. That the laws are few and simple, although the organs and process of generation are very much modified in different classes.

3. That the process of generation is more simple in a direct ratio to the simplicity of structure of the adult being; more complex as that being approaches the highest development of organisation.

4. That reproduction is in no case spontaneous, since we find that all organised beings possess direct means of reproducing their kind.

5. Reproduction may be defined as a series of actions instituted in the bodies of one or more individuals of the same or allied species, either of the same or different sexes, by which a new individual is produced.

6. That there are four modes of reproduction,—fissipation, gemmulation, ovipation, and vivipation.

7. Fissipation may be defined as the spontaneous or accidental division of an organised being into two or more parts, each of which becomes a new and perfect being, resembling in every respect that from which it was derived.

8. Gemmulation is the separation of the minute portion of an organised being, endowed with distinct vitality, and producing a new individual by simple growth and development of its substance, and produced without the agency of sexes.

9. Ovulation is the formation and separation of a sac composed of one or more membranes, and filled with nutritious matter, from one organ (female) for the reception and nutrition of a germ (or gemmule), separated from another organ (male), existing in the same or different individuals.

10. When the male and female organs are contained in the same individual, and are capable of mutual impregnation, the individual is said to be hermaphrodite; when both organs are included in the same indi-

vidual, but require the mutual impregnation of two individuals, they are said to be androgynous; when the male and female organs exist in separate individuals they are diœcious.

11. When the ovum is excluded from the ovary and oviducts before the embryo is mature, and a period of time elapses between the exclusion of the ovum and the escape of the young, the parent, animal or plant, is said to be truly oviparous.

12. When the ovum is hatched before exclusion, but without becoming again attached to the parents, animal or plant, the latter are said to be ovoviviparous.

13. Vivipation occurs when the ovum, after being separated from the ovary, becomes again attached to the maternal organs, nd continues to draw its nourishment from them until it is ready to be hatched. This form of generation obtains only in one class of animals (mammalia), and is unknown in plants.

14. Two of these modes of reproduction may occur in the same species, and the whole of them (except vivipation) in the same class. Ex. Polypiphera.

15. Fissipation, being the simple division of an organised being, requires no organs of reproduction.

16. Gemmulation may either take place throughout the whole of the animal (Poriphera) or plant (Nostoc), or it may be confined to some particular part or organ.

17. That when organs exist for the production of gemmules they are analogous to each other in the two great classes of organised beings, and strikingly so in the gemmulative sacs of vaginiform polypiphera and in mosses.

18. That the gemmules of animals are equivalent to the sporules of plants in function and development.

19. That the same general law is followed in the formation of the generative organs of oviparous animals and plants.

20. The reproductive organs of animals are essentially tubular in structure.

21. The tubular structure of the male organs subsists throughout all the classes of animals up to man.

22. The tubular structure of the female organs of animals is continued in a very distinct form up to batrachian reptiles.

23. The calyces of chelonian reptiles and birds, and the ovarian vesicles of mammalia, are, in all probability, the remnants of the tubular structure of the inferior classes.

24. The same essential uniformity of structure obtains throughout all ovuliferous plants.

25. The ovules of animals and plants are the analogues of each other.

26. The ovary of the plant is the analogue of the ovary of the animal.

27. The style and stigma are to the plant what the vagina and vulva are to the animal.

28. The anther is analogous to the testicle.

29. The contents of the pollen-cases are equivalent to the male semen of animals.

30. The pollen-cases may be compared to the elastic filaments of Needham, enclosing the spermatozoa of cephalopods.

31. The male and female organs are so analogous to each other that the one may be converted into the other in structure if not in function, as in the osseous fishes and in some monstrous plants, where the ovary reverts to the state of stamen.

32. That the male semen of animals and plants consists of a fluid holding in suspension corpuscles endowed with spontaneous motility.

33. A most perfect analogy, both in structure and function, subsists between the spermatozoa of animals and the spermatic granules of plants.

34. The ovules of the female organs, both of animals and plants, require the action of the male fluid or semen, to render them fertile.

35. The *contact* of the male semen with the ovule is essentially necessary to the production of the embryo.

36. That the ovule is fecundated by the direct action of the male semen in gymnospermoses exoqens, as cycadræ and coniferæ, where the ovule is naked, and in batrachian reptiles and fishes, where the ovules are excluded before impregnation.

37. In other cases the impregnation of the ovule occurs within the organs of the parent, as in all angiospermous plants and most animals; in these cases means are provided to convey the semen to the ovules.

38. That the spermatic granules and spermatozoa form the active part of the semen.

39. That the embryo does not pre-exist in the ovule.

40. That the spermatic granules and spermatozoa are the germs of the future being.

41. That there exists a very strong analogy between the gemmules and spermatozoa of animals and the sporules and spermatic granules of plants.

42. That the seminal animalcule of animals penetrates to the surface of the vitelline membrane, spreads out upon it in the same manner as the gemmules of poriphera on the surfaces of submarine bodies, to which they attach themselves, and thus become united to the ovule, forming the cushion-like eminence observed on impregnated ovules, this being the first rudiment of the embryo.

44. That the nucleus (afterwards albumen) of the ovules of plants may be considered equivalent to the vitellus of the ovules of animals, the primine and secundine to the external investments of the ova.

45. That the resemblance of hybrids to the mother does not at all militate against the opinion that the spermatozoa and spermatic

granules are the rudiments of the embryo, since such resemblance may be easily accounted for by the difference of nutrition.

46. That external causes may produce varieties which may be perpetuated by reproduction.

47. That the impregnation of the ovule in mammalia usually takes place in the Fallopian tubes some time after copulation.

48. Superfœtation may occur both in animals and plants, producing different varieties of young.

49. That facts are wanting to establish the resemblance of the young to either of the parents.

50. That the circumstance related in "Mayo's Physiology," second edition, page 489, cannot be accounted for by any theory, and that it requires verification.

CHOREA CURED BY MISTAKE.

Dr. Hildreth, of Zanesville, Ohio, states that he was informed by a medical friend of undoubted veracity, that he once knew a case of chorea cured in four or five days by mistake. The patient was a mulatto girl, seventeen years of age. Her physician had great confidence in the powers of arsenic in this affection; he therefore prescribed ten drops of Fowler's solution to be taken three times a day. The patient, thinking this dose too small to do any good, took twenty or thirty drops instead of ten. As a matter of course, she was completely poisoned in a very short time, and was obliged to take the proper antidotes for arsenic to save life. On recovering, however, from the effects of the poison, she was found to be permanently free from all signs of chorea. Dr. Hildreth relies upon large doses of quinine, from fifteen to thirty grains in the course of the day, given so as to produce occasional, but not constant, *tinnitus aurium*, that is to say, pushed so far as to threaten incipient *quininism*. (See ante p. 626) If there be evidence of cerebral congestion, or fulness of the vascular system, it should not be given without preparation; the secretion of the stomach and bowels should be rendered healthy, and if anemia be present, it should be combatted at first by chalybeates.—*The Chemist.*

Colouring Properties of Aloetic Acid.—M. Barreswille has remarked that this substance melted with common resin gives to it a most intense blue colour. He has not yet been able to extract from the combination this colouring matter, but he has remarked that the resin thus tinted readily dissolves in alcohol and essences, and unites with fatty substances, which bodies it may, accordingly, be employed to colour. A few grains of crude aloëtic acid melted with four or five drachms of resin are sufficient to colour a pound of fat.—*The Chemist.*

THE LANCET.

London, Saturday, August 19, 1843.

In these days of homœopathy and hydropathy, and other humbug devices with names pretending to be Greek, we should regard with suspicion every innovation in medical doctrine or practice which appears in an hellenic garb—a suspicion that is engendered, naturally enough, by the probability that alleged discoveries which are announced in dead languages will turn out to be only new contrivances of quacks to gull the inexhaustibly gullible public. There is, however, one new practice, raised under a Greek flag, namely, *hemospasia*, which has for some time deservedly attracted attention in France, and which does not appear to belong to the category of humbugs. Hemospasia forms the subject of an article in the "Gazette Médicale" of the 22nd of July last, in which journal it has before been noticed, and seems to us to be worthy of serious consideration. It has, moreover, some relation to the *conversazione* of "old friends with new faces," at which we have latterly entertained our readers. We shall here, therefore, introduce it to their notice.

This practice, the name of which is derived from *αἷμα, blood*, and *σπαω, I draw*, or *attract*, consists in effecting revulsion by forming a vacuum over a considerable extent of the surface of the body—of one or two limbs—or even one half of the body. The practice has been introduced by M. Junod, who has invented particular apparatus adapted for the purpose, and to whom one of the Montyon prizes has been assigned by the Academy of Sciences for this improvement in therapeutics. The Academy has expressed, in two different memoirs, a highly favourable opinion of M. Junod's views and practice, which are alleged to have been tested in the Parisian hospitals with the most satisfactory results.

Having not yet seen the work published

by M. JUNOD, nor the reports of the Academy upon his labours, we are not in a position to enter into particulars with respect to them. We would, however, direct attention to the principle involved in this method of cure, which is evidently the same with that of dry-cupping, namely, that of drawing the fluids *towards* some part of the body, and, consequently, *from* some other part, without diminishing the aggregate quantity of fluid circulating in the whole body at the time. The importance of this intention in many diseases, and chiefly those of a congestive kind, must be sufficiently obvious; yet it seems to have been much better appreciated formerly than at present, since the practice of dry-cupping was very familiar to the ancients, and to the moderns, also, down to the seventeenth century, while, in the present day, it is rarely employed, although we occasionally hear of it.

Considering the *hémospasie* of M. JUNOD to be what it evidently is, an application of the principle of dry-cupping on an extended scale, it must be regarded merely as a revival of an old practice, although, doubtless, improved in efficiency by the apparatus invented by that gentleman. In the entertaining and instructive work of PROSPERO ALPINI, entitled "De Medicinâ Ægyptiorum," it is remarked that the Egyptian practitioners did not use cupping-glasses to elicit eruptions in malignant fevers, which was a very much esteemed practice among some of the physicians of Europe. "Nam "hi (medici nostrates, scil.) in istis febribus "applicant ad decem usque et plures cucur-"bitulas *universo corpori*, interdum scarifi-"catas, atque interdum *citra scarificationem*, "ut ex alto a partibus nobilibus ad cutim "venenum avellant."* (Lib. ii., c. 16, *sub initio*, Ed. Venet, 1592.) So that in the sixteenth century it was a frequent practice to use dry-cupping over the whole surface of the body, which must be acknowledged to have been a pretty active *hémospasie*, and the latter practice—so novel that its name has, probably, not yet been heard by the greater part of European practitioners—turns out to be, in some sort, another "old friend with a new face." We mean not to detract, in the smallest degree, from M. JUNOD's merit in bringing forward the practice and suggesting the use of apparatus by which it may acquire increased efficiency. We desire merely to illustrate the utility of studying the *old writers on medicine*, which would save ingenious gentlemen of the present day a deal of trouble, and set them about improving what has been already designed, instead of planning what was old even in the time of our grandfathers. Archæology apart, we call the attention of our readers to M. JUNOD's practice, which seems to be susceptible of some very important applications.

While ALPINI's work is open before us, we will advert to another topic, foreign to the preceding, but equally illustrative of our position. ALPINI, speaking of the Egyptian practitioners of his day, says,—"In singulis enim inflammationibus diu "perseverantibus, solent partem inflam-"matam alte scarificare, veluti in pleuritide "latus dolens, atque in peripneumonia "pectus, dextrumque hypochondrium jecore "inflammationem patiente, atque liene sinis-"trum, atque sic de aliis inflammatis parti-"bus facere solent, præsertimque *in magnis* "*erysipelatis* vel aliqua alia inflammata "parte, ubi pertimetur ne in gangrenam "degeneret, vel in scirrhum abeat."* (Op. Cit., Lib. iii., c. 11, *sub initio*.) We learn from cap. v., viii., &c., of the same work, that these so called *scarifications* were not such as are made with a scarificator, previous to cupping, but *incisions*, from which the blood flowed slowly, and was elicited by warm-water. In short, with reference to *erysipelas*, which is the point that we chiefly have in view at present, the Egyptian surgeons of

* "For these (our own physicians to wit) apply, in those fevers, as many as ten cupping-glasses, or more, sometimes with scarification and sometimes without, in order that they may draw the poison outwards from the noble parts to the skin."

* "In all inflammations of long continuance they are accustomed to scarify deeply the inflamed part—as the painful side in pleurisy, and the breast in peripneumonia, and the right hypochondrium in inflammation of the liver, and so on with respect to other inflamed parts, and especially in severe erysipelas, or other inflammation of a part where there is fear least it should degenerate into gangrene or pass into scirrhus."

the days of PROSPERO ALPINI did very much the same thing as Mr. COPELAND HUTCHISON has in our days, perhaps additionally proud of the plan from its possessing an ancestry amongst the Egyptians; nor is it the less useful on that account, although it has been too indiscriminately applied, and sometimes even so incautiously as to produce fatal results.

SYDENHAM was reviled as an innovator and a homicide when he introduced the cooling regimen in small-pox. Subsequent experience has abundantly acquitted him of the charge brought against him by the ignorant and the timid; but general belief still attributes to him what is now considered as the *merit* of the innovation.

As yet we have not referred to the revival of old medical opinions and practices from any of the Arabian writers, and as the Arabians were principally copyists of the Greeks, the former do not, in truth, abound in materials that are adapted to illustrate such topics. Some very remarkable instances, however, occur, in which the neglect of the Arabic literature of medicine —which formed a kind of transition from the Greek to the literature of more modern times—has retarded the progress of the science, and kept professors of medicine in ignorance of what they ought to have known. One of the most striking is to be found in the case of small-pox. Those who abused SYDENHAM for his antiphlogistic treatment of variola, knew as little as many persons who now render him honour for the same, that such treatment was by no means new, but had been inculcated ages before by the Arabian RHAZES, who flourished at the close of the ninth and the beginning of the tenth centuries, and whose writings contained the first account of small-pox, through which that disease became distinctly known in Europe. The treatise of RHAZES appears to have been unaccountably neglected, much to the detriment of medicine; for had the physicians of Europe, down to the time of SYDENHAM, been acquainted with the contents of his work, they would have entertained much more correct views, both as to the pathology and the treatment of the disease, than they actually possessed. In fact, setting aside the old theories, which mystified the views of the Arab, and the new theories, which, perhaps, no less mystify our own, we doubt if the present amount of knowledge relative to small-pox be much greater than that contained in the able, comprehensive, and delightfully-written treatise of RHAZES. Dr. MEAD, who was himself a high authority on small-pox, well knew the value of this treatise, and—being aware that the Greek and Latin translations of it then existing were not made directly from the Arabic, but were derived from a Syriac version—was very desirous of having it correctly translated from the Arabic into English. Being furnished by BOERHAAVE with an Arabic manuscript, he had two Latin versions made by different persons, which were collated and compared with the original by Dr. HUNT, then professor of Arabic at Oxford, who gave an English translation, which MEAD published as an appendix to his own "Discourse on the Small-pox and Measles." MEAD, however, intimates his belief that the Arabic MS. which fell into his hands was by no means very correct. An excellent edition of RHAZES on the small-pox (Arabic and Latin) was subsequently published by CHANNING, in octavo. But this has long been out of print, and is now exceedingly scarce.

The following extract from MEAD's translation will suffice to show the superiority of RHAZES' practice over that so long followed in Europe:—

"When you observe, upon the signs of the disease, a distention of the belly, pain in the back, redness of the face and eyes, a violent headach, with a full pulse, and also a streightness of breath, a red and turbid urine, and such a heat of the body as a man feels who has been for some time in a hot bath, especially if the body be fleshy, there is then all the reason in the world to take away blood. Wherefore, draw away a good quantity, even until the patient faints away. It will be best to do it from the basilick vein, or some of its branches; but if that cannot be found, from the cephalick vein. Sometimes, when the basilick does not appear, it may be taken from the vein in the ankle, but better from the basilick or its branches, because they draw from the greater veins in the abdomen more than the cephalick does. If the symptoms do not run very high, although they are manifest, draw blood but sparingly; and when they are less, take away very little. Then proceed in the cure with repelling medicines, as has been mentioned. If by these the feverish heat is removed, and the pulse and breath are come to their natural state, still insist on the use of them until the heat of the disease is perfectly abated, which will be done in a short time. In order more effectually to perform

this extinction, let the patient drink water, made cold, in snow, to the highest degree, very plentifully and often, so that he may feel the coldness of it in his bowels. If, after this, the fever and burning return, give this water a second time, two or three pints or more, in the space of half an hour." —Chap. v.

In chap. xiv. of his treatise, RHAZES describes very accurately the several varieties of small-pox, and it may be noticed that the horn-pock, or mitigated confluent form, seems, in his days, to have been much more formidable than at present. He says,

"As to those pustules which are white, very small, coalescing, hard, warty, and contain no fluid, they are of a bad kind; and their badness is in proportion to the degree of difficulty in their ripening, and to the continuance of the symptoms on their eruption. But if the symptoms be not abated after the eruption is finished, it is a mortal sign."

It is remarkable that MEAD, also, speaks of this form of variola as being much more serious than it is now considered to be, which circumstance, in conjunction with the above testimony of RHAZES, would lead to the belief that it has, in the course of time, altered its character, like several other diseases which appear to have been much more fatal at their first outbreak than at any subsequent period.

These quotations tend to show that the Arabian writers on medicine, inferior as they are to the Greeks, are not only not to despised, but are able to afford us considerable instruction in the present day.

DR. HENDERSON says there are no special and peculiar symptoms (not connected with the size of the organ) by which acute inflammation of the spleen can be distinguished from acute inflammation of other organs or tissues within the left hypochondrium. M. Piorry, on the other hand, says that intermittance in the febrile symptoms is peculiar to disease of the spleen, or, in other words, that intermittent fever characterises splenic disease.

"THE whole science of healing is built upon fortuitous and chance discoveries. Like the alchemists of old, we have discovered a thousand valuable things, where we never thought of looking for them; and whilst uselessly seeking for talismanic gold, we have lighted on a pearl of great price. Everything, in fact, is presented to us as the result of experiment; and, in the treatment of disease, the most valuable remedy can boast of no higher origin than its more humble neighbour."—*G. B. Childs.*

A Medical Visit to Gräfenberg in April and May*, 1843, *for the purpose of investigating the merit of the Water-cure Treatment. By Sir CHARLES SCUDAMORE, M.D., F.R.S., H.M.T.C.D., J.C.P.V., &c., &c. London: J. Churchill, 1843. 8vo, Pp. 100.

THIS third of those three great medical follies—the Homœopathy, Mesmerism, and Water-cure—to which may now be added a fourth "universal" cure—the miraculous Virgin—will leave behind it so much of its moral as is grounded on truth and—like the Virgin of Rome—no more. That water, either as a diluent or a convenient medium of applying heat and cold, has most important uses as a therapeutic agent, we very well know. Grant the merit of perseverance to Preissnitz, in ceaselessly employing an agent that has been much neglected in the cultivation of health. Perseverance carried to absurdity deserves only laughter; but when a man, without either medical or general education, proposes a theory of disease that admits a single remedy to remove disease under every modification of circumstances, and manages to attract into his circle of believers not merely whimsical hypochondriacs and the thoughtless rich and titled, but professors of medicine, whose experience and habits should be safeguards against irrational infatuations, we give some attention to the quackery, and gravely inquire what are the measures and what the cures of the head of the new creed. Fortunately we can refer our readers to THE LANCET, pp. 272-276, of this volume, for a general account of the system pursued at Gräfenberg, so that without repeating the old catalogue of wet-sheets, rubbing-sheets, sweating-blankets, douches, bandages, baths, potations, and the other details of Priessnitz's method, we may at once seize the matter which Sir Charles Scudamore, a new convert to the Silesian scheme, has added to the stock of printed announcements.

Sir Charles, after broadly mis-stating that "the subject of hydropathy is one of the highest importance to the whole civilised world," tells us very oddly, at the outset, that Priessnitz is, at best, an empiric, having a vast experience for his guide, and no principles of medical knowledge to reason from, beyond those which he has learned from a long study of the book of Nature. Had the Austrian known the

history of medicine he must have been aware that by every medical writer, from the times of Hippocrates and Galen to those of Currie, water has been extolled as a valuable therapeutic agent. Priessnitz only went beyond this rational doctrine into the absurdity of proclaiming its sovereign efficacy, to the exclusion of medicines, which are denounced as disturbers and impairers of the efforts of nature :—

"Priessnitz has one single theory of disease, which serves for all persons and all disorders, that, namely, of the humoral pathology upon a general principle; not attempting any division of the humours according to the doctrine of the ancient physicians, but contented to believe that in every disease the blood is more or less charged with morbid matter, and which nature is always ready to throw out of the system, if properly assisted. He considers the use of medicine of every kind to be a false interference with nature, tending to disturb and impair her efforts; and that, on the other hand, if fortified and assisted by the agency of water externally and internally, in conjunction with fine air, abundant exercise, and the avoidance of hurtful stimulants, she will acknowledge the help given, and will, in a longer or shorter time, throw off the disease, usually rendering a proof of such salutary operation by the production of some kind of crisis."—*Sir C. Scudamore*, page 5.

The former half of this statement, that respecting the humoral pathology, we will acknowledge as, probably, a correct theory of disease, without inquiring how Priessnitz, confessedly ignorant of medicine, became possessed of a notion that was entertained by the ancient medical writers, and only revived, on improved principles, by Drs. Parry, Hall, and Liebig,—without questioning whether we owe it to the hints he might have obtained from his medical clients, or to a happy guess analogous to that of Pythagorus respecting the Copernican system. But what must be said—indeed, even Sir Charles (see p. 80—91) does not wholly assent to it—respecting the statement in the second sentence, that medicine of every kind is a false interference with nature, to the *vis medicatrix* of which, aided by cold water, we are to trust for the removal of all diseases whatsoever? Why, that it is an assumption grounded on an utter ignorance of the distinctions between early and long-established, or what are commonly called functional and organic diseases, and of the modes in which medicines are known to operate on the body.

We gave, the other day, a very particular and descriptive name to hydropathy (by-the-by, we see that Mr. Herbert Mayo has also adopted the quackery), and we see nothing in this work to make us amend the term. Out of forty cases selected to illustrate the water-cure, we reject one half as cases of dyspepsia and nervous debility, resulting from close study and such causes as irregular and excessive indulgence, on the abatement of which, and the substitution of good air, regular exercise, teetotalism, and tonic medicines, health would at once return, whether at Gräfenberg or Brighton. Two or three other cases may be set aside as cures effected rather in spite of, than by the aid of, the water that was employed in the treatment. And of the rest we may say, what may fairly be said of all anonymous cases in private practice that are published to catch patients—and who doubts for a moment that such is the object of the present work?

A doctrine much insisted on by Priessnitz, as indicative of disease, is *crisis*; and as the law of periodicity in fevers and disease, generally, has been treated in detail by Dr. Laycock, in the last volume of THE LANCET (p. 127), we shall extract Sir Charles Scudamore's account of Priessnitz's notions on what may fairly be termed a *vexata quæstio* among the most learned pathologists. (See article "Disease," in the "Cyclopædia of Medicine," vol. i., p. 618.)

"*Crisis* is always sought for with much solicitude, both by Priessnitz and his patients. He believes that it could not be produced in a healthy man, and that its occurrence is a sure proof that nature is successfully exerting herself to throw off the disease by the exit of bad humour from the mass of the blood. It is a sort of wholesale theory, and equally serves for all persons and for every known disorder; and assuredly *it is the most convenient for one ignorant of medical science.* . . . Priessnitz's principles have arisen out of practice as an empiric art, and were not, as a precursor, first implanted in his mind. He has, in instances so numerous that the contrary forms the exception to the rule, witnessed the formation of crisis in the progress of the water-cure, amongst which boils take the lead in pre-eminence and importance of character. . . . It was a fact of ordinary occurrence, presenting itself to the mind of Priessnitz, that the great crisis of boils, in proportion to their free suppuration,

proved in the highest degree remedial, removing chronic pains and internal sufferings of long standing, and that no marked amendment took place till after some crisis. Also, the additional fact must be mentioned, that very frequently indeed the boil crises would appear in the immediate vicinity of the disease, sometimes on the very spot. It is no longer surprising, therefore, that the idea of humour in the blood should be strongly confirmed in the mind of Priessnitz, and have grown with him into a rule of practice."—P. 27.

What a strange mixture of bold assertion and blundering reasoning! Medical treatment is an experiment to produce external boils and abscesses! The professors of medicine throughout the world have literally nothing now to do but to set pupils and students to work to produce boils and abscesses on the body—by means of cold water, if possible, but, most certainly and justifiably, if *the doctrine of disease be true*—by *any means that can be used*. Sir Charles, much as he eulogises Priessnitz, had, it seems, no fancy for a crisis, and employed a rational course of medicine to aid the air, exercise, bathing, and potations, which he took. Had he placed a firm reliance on the method that he advocates, and on the sagacity of its inventor, he would at once have thrown all physic to the dogs but water, twenty glasses a-day, and gone through the unalloyed routine of bathing, rubbing, and bandaging, in patient expectation of the *vis medicatrix naturæ*.

It is but fair to him, despite his book, to say that he considers the pretensions of hydropathy, though they be of no small extent, to have many and important limits. "Every day," he says, "presents cases in which the *whole* system of treatment is not applicable, and among the exceptionable diseases may be enumerated confirmed consumption; confirmed epilepsy; apoplexy, or a threatening tendency to it; inveterate scrofula; all serious diseases of structure; cancer; the maladies of infirm old age; certain states of great debility; and some other conditions of aggravated malady;"—a pretty admission to print in the midst of such a general creed, especially when he says, farther on (p. 97) that "it would be absurd to think of setting aside the established practice of physic, as some enthusiasts at Gräfenberg would declare."

So much heresy amongst so hearty a confession of faith would surprise us, but for one thing: Sir Charles is the author of eight volumes, or pamphlets, on subjects viewed according to *the half-deserted system of medicine*, the advertised price of which—for they stand enumerated in long array at the end of the present treatise—is fifty shillings and sixpence. What shall become of these—first editions, new editions, and editions to come? Like the woman at the church who lit twelve candles for St. Dunstan and one for the Devil, Sir Charles has acted very discreetly in excepting from the catalogue of water-maladies what, in his usual ignorant style of writing, he calls, "some other *conditions of aggravated malady*;" he would save his old books from going to the trunk-makers, and keep those patients who prefer the treatment of gout, gravel, rheumatism, tic-douloureux, hæmorrhages, and tubercular phthisis (his former subjects), according to the old heresy.

BRITISH MEDICAL ASSOCIATION.

Exeter Hall, August 8, 1843.

The president (Dr. Webster) having reported his communication with Sir James Graham printed in the last Lancet, and Mr. Maule's questions in the House of Commons, it was resolved that farther questions should be asked to be put by some member of the House to Sir James respecting new charters to the Colleges of Physicians and Surgeons.

A communication from Mr. Wm. Gradwell, of Kirkham, Lancashire, on a subject connected with the poor-law medical grievances, was ordered to be inquired into. The following letters addressed to the secretary of the British Medical Association were then read:—

"Worcester, July 20, 1843.—Sir: I beg to inform you that I duly received, from Mr. Eales, a copy of the resolutions passed at a council meeting of the British Medical Association, and that at the last council meeting of the Provincial Medical and Surgical Association they were produced, and the following resolution adopted, viz.,—That as the anniversary meeting of the Provincial Association is so near, the council are of opinion that it is most prudent to refer the resolutions of the British Medical Association to the council at Leeds.—I am, Sir, &c. Charles Hastings."

"12, George-street, Glasgow, July 20, 1843.—Dear Sir: On receipt of your communication the other day I called a *pro re natâ* meeting of the council of the Glasgow Medical Association, and submitted to the members the series of resolutions contained in your letter. The council unanimously resolved to petition the Queen in accordance

with the spirit of the resolutions, and I yesterday despatched the petition to Sir J. Graham to be presented at the first convenient opportunity. I am, &c. JAMES MACLEAR, M.D."

A letter from Mr. NANKIVELL, of St. Colomb, dated July 17, 1843 made a similar acknowledgment, with a promise to take the steps suggested therein, but expressing a fear that "the whole subject of medical reform, charters, &c., would not, in the present turmoil of politics, receive the slightest attention from Government." A letter, also from Mr. LIVINGSTON, hon. sec. to the Provincial Medical and Surgical Association of Scotland, dated 151, Leyate, Dundee, July 13th, stated that he (Mr. L) had sent a copy of the resolutions of the British Medical Association to Mr. DUNCAN, M.P., for Dundee, with a request that he would support them in his place, and Mr. Livingston also promised to prepare the necessary address to her Majesty, and a memorial to the Home Secretary, and procure as many signatures to them as possible without delay.

The meeting then adjourned.

ELEVENTH ANNIVERSARY MEETING OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION,

Held on August 2nd and 3rd, 1843,

AT LEEDS.

(Concluded from p. 719.)

(*From the Correspondent of* THE LANCET.)

THE ANNUAL DINNER.

THE dinner of the members of the association and their friends took place in the rooms of the Commercial Buildings, at six o'clock, Mr. HEY, sen., in the chair, and Mr. T. P. TEALE, Dr. HOPPER, and Mr. SMITH, vice-chairmen. About one hundred and thirty gentlemen were present, many gentlemen of the neighbourhood, not of the medical profession, joining to partake of the excellent fare that was provided. A party of very clever glee-singers helped to enliven the evening, aided, in one piece of music, by a member of the association, to the great delight of the company.

After the usual "loyal toasts" had been drunk, the CHAIRMAN proposed "The Provincial Medical and Surgical Association, and Dr. Hastings, its founder;" observing that as these two parts of the toast must always be associated in their minds, it was fitting that they should be joined together now. He (the Chairman) must frankly own, that in the beginning he was not quite so sanguine as to the stability and efficiency of the association as many others were; but he now believed it would prove a new era in the medical history of the provinces, by eliciting talent, propagating zeal, and raising the character of the profession. (Applause.) Its rapid progress brought to his mind a trifling anecdote. His father was presiding at the anniversary of a society to whose success he had ardently contributed; in one hand he had the report for the first year, comprised in a few pages, and in the other a thick volume. Holding up the first, he said, "Here you see a child of one year, and here the child of eight." The progress of this association formed no unworthy parallel of that. In the first year the members were only 230, and now, at the eleventh, it comprised about 1600. (Hear, hear.) To what extent this might increase it was impossible to tell. The leaven seemed to be working in the mass, and he trusted would go on until the whole was leavened. In Leeds it was clear that the association was not declining, for, during the year just closed, the members had increased fourfold. May it long go on prospering!

The toast was drunk with three times three, and "one cheer more" for Dr. Hastings.

Dr. HASTINGS rose to return thanks amid much applause, and said he could not fully express his gratitude for the overflowing kindness shown to him. The happiest moments of his public life had been spent in connection with the association. Long before its establishment efforts had been made by some of the greatest men of the profession—such as Parry and Jenner—to establish similar associations in the provinces; but their efforts failed. The advancing civilization of the towns, and especially the increased facilities of communication, had led to the success of the great experiment. (Applause). When the association was formed, the objects of its founders were at once scientific and social. They had particularly in view the collection of facts in hospital and private practice, and the increase of our knowledge of endemic and epidemic diseases, publishing annually a volume of Transactions containing the facts collected from year to year in the provinces. They had now published eleven volumes, and in every volume had kept steadily in view these objects. But though they had brought together a great quantity of knowledge, they had not, perhaps, accomplished all they might have done. If in anything their Transactions had failed, it was with respect to hospital reports, considering the number of practitioners connected with those valuable institutions, who he would particularly press to enrich their Transactions with more reports. (Hear, hear.) Another subject had been too much neglected by the profession, namely, medical topography. (Hear, hear.) Previously to the formation of the association, medical topography could not be said to have been cultivated at all in the pro-

vinces of England; go where they might they could ascertain little or nothing certain of the diseases which more especially affected particular localities; and the association had been very fortunate in obtaining for each volume valuable statistical and topographical accounts of disease in many large towns, and particularly from the West of England. If their Transactions contained nothing but important papers on medical topography they would be eminently worthy of the age in which they lived. He hoped that every year would show an increasing desire in the provinces to cultivate it. With respect to the journal published by the association, he looked upon it as an important element in their success, and a valuable means of accumulating the cases and facts which were daily occurring in the experience of the profession. As to the Benevolent Fund he could not agree with Dr. Cowan, that the subscriptions ought to be raised to increase it, yet he regarded it as an important object of the association, and he hoped to see it reach an amount that would be worthy of the purposes for which it was intended. (Applause.) Another subject, a delicate one, to which he would allude, had more or less occupied the attention of the association since its commencement, viz., the medical polity of the profession, important to the interests not only of the profession itself, but of the community at large, and he congratulated them that the association had at this anniversary come to a resolution asking certain things of Government and Parliament without a single hand being held up against the proposition. He looked forward with confident hope that the day was not far distant on which some advantageous circumstances with respect to medical polity would take place. Applause.) He observed that much as he estimated the scientific purposes of the association its social effects were quite equal to its scientific advantages. It caused them to assemble from all parts of the country, actuated by the best motives, and with the most friendly wishes for each other's prosperity and success. Those who had not seen each other for years thus renewed their acquaintance, and those who had never heard of each other before were brought together in a manner calculated to produce the most friendly regard. (Cheers.) In conclusion he said that his life should be devoted to their service, and he should ever be anxious to assist them in carrying forward their great and glorious objects.

The following toasts were proposed in succession:—"The health of the chairman, Mr. Hey." "Dr. Wm. Conolly, and success to the Benevolent Fund." "The health of Dr. Robertson, of Northampton." Dr. Conolly, of Hanwell, proposed "The Medical Charities of the town of Leeds," which was responded to by Mr. S. Smith. Mr. Soden, of Bath, gave "The health of the permanent Vice-Presidents of the Association." Dr. Jeffrey, of Liverpool, returned thanks. Dr. Robertson proposed "Success and prosperity to the Sydenham Society," which was responded to by Dr. Branson, of Sheffield. Dr. Williamson, of Chester, proposed "The Authors of the Retrospective Addresses." Dr. Shapter and Mr. Hey returned thanks. Dr. Forbes gave "Success to Provincial Medical Schools." Mr. Turner, of Manchester, returned thanks. Mr. Martin, of Reigate, gave "Success to the Provincial Medical and Surgical Journal," and "Dr. Hopper, the Local Secretary, and the Committee of Management." "The West Riding Medical Charitable Society." "The health of the Vice-presidents, Dr. Hopper, Mr. S. Smith, and Mr. T. P. Teale." "The health of the Secretary of the Association, Dr. Streeten." Dr. Belcombe, of York, gave "The Ladies." Dr. Hopper returned thanks. Dr. Williamson gave "The Medical Press."

The evening passed off very agreeably, and the chairman retired at a quarter past eleven o'clock.

FRENCH MEDICAL SOCIETIES.

NEW SYSTEM FOR CURING STAMMERING. PURIFYING AGENTS. VERMINOUS TUMOURS IN HORSES. STATISTICS OF INSANITY. NUTRIMENTAL QUALITIES OF TEA.

ACADEMY OF MEDICINE.

JULY 4th. (M. Dubois, president.)—M. Colombat, of Isere, read a memoir giving an exposition of his system for the cure of stammering. According to him, stammering is purely a nervous affection, a functional disease, and is of two kinds, *choreic* and *tetanic*. Choreic stammering consists in a kind of chorea of the lips, and a succession of convulsive movements, more or less rapid, of the tongue, lower jaw, and all the muscles of articulation. The stammering called by M. Colombat tetanic, is marked, as he says, by a kind of tetanic rigidity (*raideur*), or a tonic spasm of all the respiratory muscles, but eminently those of the larynx, pharynx, and base of the tongue. This kind of stammering is most perceptible in the guttural letters, to articulate which is always a painful effort, signalised by an explosive and hurried sound (*expiration anticipée*) and then an interval of silence before the finishing of a word; by immobility of the tongue, closure of the glottis, a sense of pressure within the chest, and a momentary impression of suffocation. Individuals of the more active temperament and nervous excitability generally suffer from choreic stammering; these speak rapidly and commonly without effort, but with the repetition of certain letters—b-b-b—f-f-f, &c. On the other hand, in the

gutturo-tetanic species of stammering, persons speak slowly, and evidently with effort. Both these kinds, however, often affect an individual at the same time. We need not enter into M. Colombat's numerous subdivisions of the two kinds of stammering.

Among the curative means proposed by the author are the following:—Patients with the choreic kind are advised to employ the zygomatic muscles pretty constantly, and while speaking to open the commissures of the lips, as in smiling. With the lips brought into the resulting position, labial stammering is next to impossible, and the tongue also, carried backwards, facilitates the pronunciation of other than the labial letters. For the tetanic kind another exercise is proposed, bringing into play at once all the muscles concerned in the production of speech. It consists in drawing an inspiration, at the same time forcing backwards the tongue, so that its point should approach the velum palati, while the lips are extended as above detailed for the choreic kind. At other times, in lieu of stretching the lips transversely, the mouth is extended vertically and the jaws separated as widely as practicable for the pronunciation of syllables. At this time, also, the tongue is to be retracted in the mouth to a distance of two or three lines behind the teeth. The hurried nature of the respiratory acts in stammering of this kind, consequent on spasm of the chordæ vocales, &c., is thus brought under control. By throwing back the tongue into the pharynx, in the manner indicated, the opening of the glottis is widened at the same time that the chest is filled and emptied of air. Several accessory means are employed by M. Colombat with a similar view. He directs the attention of his patients eminently to the *rhythm* of the sentences they employ, which tends to withdraw their minds in a salutary manner from noticing their physical defects; he inculcates the use of certain syllabic exercises, and for choreic stammerers especially he has invented an instrument which he calls the *muthonome* (μῦθος, speech, and νεμω, to govern). This instrument acts somewhat like Maelzel's metronome, but is constructed on another principle, and will go for several days without being wound up. By its means, M. Colombat limits the syllables to which his patients give utterance at first to 60 or 80 in a minute, which number he gradually increases to 160 or 180 in the same space of time. The foregoing are among the methods by which M. Colombat has, as he says, in a period of fifteen years, restored the free exercise of speech to 782 persons, of whom 643 were cured without relapse. In general, from a month to six weeks' perseverance in his treatment has been sufficient to obtain a cure, though it may sometimes have to be prolonged for about three months. In the

ACADEMY OF SCIENCES,

at the sitting of July 3rd, a memoir on the same subject, by M. Jourdant, was read, in which it was advanced that stammering was for the most part a consequence of too rapid expiration, obliging the patient to respire several times to enable him to conclude a sentence. The suggested treatment was, accordingly, as follows:—The patient is to perform a natural inspiration, the course of which is to be suddenly arrested. A sentence is then to be begun, slowly pronounced, and continued till it, or a fixed portion of it, is finished. Then the air remaining in the chest is suffered to escape altogether, and, after a short pause, the same process is to be recommenced. The tongue is to be maintained in an easy and natural position, "which is that in which it lies, for instance, after having swallowed the saliva." The medium time occupied in cure, according to this method, is reported to be a month, the patient practising the method recommended for two hours daily.

At the sitting of July 10th M. Boussingault made a favourable report of a method proposed by M. Sirey for the removal of fæcal stench. The agents used for this purpose by M. Sirey are powdered charcoal and sulphate of iron.

M. Valenciennes read a paper on verminous tumours found in the stomach of the horse, the worms inhabiting which tumours are altogether different from those found in the large intestine. Out of twenty-five horses, the stomachs of which he examined after death, either alone or in conjunction with M. Rayer, he had found these entozoa in eleven, in one of which were two verminous tumours and in another four. They were situated between the mucous and fibrous coats of the organ, with the cavity of which they communicate by from one to five openings, and through these the worms easily pass. The tumour is internally subdivided into cells by folds of membrane secreting a mucus, which sometimes concretes in such a manner as to give the tumour almost a scirrhous hardness. The worms lodged in these cavities are supposed to be the *spiroptera megastoma* of Gurlt; but M. Valenciennes considers that they ought to be classed between the spiropteræ and the ascarides. The males are nearly half an inch in length, by about 1-50th of an inch in thickness; the females are somewhat larger and stronger, varying in length from half an inch to an inch and a third, and nearly a millimetre (1-26th of an inch) in breadth.

M. Moreau de Jonnès made some strictures on the public records respecting insanity in various countries. While our own Parliamentary reports have been, according to him, accustomed to rate the prevalence of insanity in England and

Wales much beneath the truth, the official reports of the United States have erred so widely on the other side as almost to make us think mental alienation an epidemic there. Thus, in Maine, the proportion of the insane to the whole population is stated to be 1 in 14, or one person so affected in every two or three families! The total number of the insane in France, taking an average from eight yearly registries, is stated to be 18,350, or 1 in from 1900 to 2000 of the whole population. The new admissions into lunatic asylums (public and private) vary annually from 5400 to 5800, being, therefore, about 1 in 6000 of the population; the cures or discharges from the asylums are about 3000 yearly. The mortality is considerable, varying from 1600 to 1970 yearly, or from 9 to 10 per cent. Of 1000 insane persons in France, 221 (or 1 in 3) are idiots; 112 (or 1 in 10) epileptics; and 667 (or 2 in 3) lunatics.

At the sitting of July 17th M. Peligot read a paper on the chemical composition of tea. As this substance (says he) contains more nitrogenised matters than any other substance used as food (?), it may be considered an article of diet of high importance. On instituting a comparison between ordinary sugared tea and broth of moderate richness, M. Peligot has arrived at the following conclusions:—The ordinary broth of the Dutch East India Company's service, as analysed by the French academicians, has been found to contain, in a quart, 15 grammes (nearly half an ounce) of soluble organic matters, and 9 grammes (2¼ drachms) of soluble inorganic matter (salt, &c.). The presumed quantity of nitrogen in the organic matters was not determined by the academicians, but M. Peligot estimates it at about eight per cent., which would give about 18 grains by weight in a litre or quart of broth. Tea made with 5 drachms to the quart of water and sugared, gave the following results:—Dry residue of infusion of tea, 1⅛th drachms; sugar, 6½ drachms. These products comprise about 13 grains of *theine*, and 4½ grains of nitrogen. Thus, if broth be the richer in nitrogen, tea-infusion (with sugar!) contains solid matter in greater quantity; and tea may, therefore, be not only an excitant, but an article of considerable nutrient quality.

M. Ricord has just given a formula in the "Gazette de Santé" for *iodiuretted syrup of sarsaparilla*, which is composed of a drachm of iodide of potassium to about twelve ounces of sarsaparilla syrup, and which, as he says, is highly suitable as a remedy for *tertiary* syphilitic symptoms, or after the patient has been the subject of a long mercurial course. A tablespoonful may be taken three times daily.

MEDICAL ARRANGEMENTS IN NORTHERN ITALY.

The French journal, "L'Experience," advocates strongly the question to be discussed in the ensuing meeting of the *Congrès Scientifique*, viz., the establishment in the chief town of each department of a permanent medical board to watch over the interests of the profession, and it suggests as a model, in some respects, the *Protomedicat* of some of the adjacent states in northern Italy.

"The Protomedicat (says M. Combes, in his treatise 'De la Medicine en France et en Italie') constitutes an especial magistracy, a medico-chirurgico-pharmaceutical council, presided over by a chief, with the title of *protomedicin* (physician-in-chief). It is composed of equal numbers of physicians surgeons, and apothecaries, and is divided into three corresponding sections (the obstetric art belonging to the section of surgery.)

"The Protomedicat, newly organised in Piedmont by a law of 1839, is established on the recognition of a legal and direct right of surveillance by the state over all practitioners of medicine or surgery, human or veterinary, so as to prevent any practitioner overstepping the limits of the branch for the practice of which he is qualified.

"In the duchy of Parma its powers are more distinctly defined. It there has the right of deciding on the competency of candidates to practise; of maintaining authority among, censuring, or punishing them; of deciding in differences between practitioners relative to affairs of practice; of hearing complaints of patients, and settling differences between them and practitioners; of expressing opinions to the state respecting the merits of practitioners, and of guarding the limits of each branch of medical science. Besides the above privileges the Protomedicat has the right to cite before it any practitioner, and to reprimand those *viva voce*, suspend them from practice for a period, cashier them (*les destituer*), and declare them incapable of becoming members of the Protomedicat."

RESISTANCE OF MARBLE TO DECOMPOSITION.

Marble of high density has been kept in concentrated nitric acid without being visibly acted upon. But if washed, dried, and powdered, and re-introduced into the same acid it has been strongly acted on, and the action resumed on successive additions of water; it has been concluded that marble is attacked by concentrated nitric acid, with energy proportional to its surface, becoming covered with a varnish of nitrate of lime, insoluble in concentrated nitric acid. This nitrate of lime concentrates the nitric acid in which it is produced, and renders it more strong; but accordingly renders the continual addition of water necessary to further oxidation.

CLIMATE AND CHARACTERISTICS OF NICE.

Nice, a city with nearly thirty-four thousand inhabitants, is situated on the Mediterranean, just within the confines of Italy, on a promontory, proceeding from a range of the maritime Alps, in lat. 43° 41′ N., and long. 7° 16′ E. Its climate is supposed to be the mildest on the north coast of the Mediterranean, owing to the gradually rising lines of hills which shelter it from the N.E. round to the W., leaving it open to winds only on the S. and S.E. From observations, continued from 1806 to 1838, the mean height of the barometer has been found to be 27.11, the range being only between 26.11 and 28.8. Out of 36,135 observations of the thermometer, it was only once seen to rise so high as 92° 5′ Fah., the lowest point having been 15° Fah. The maximum of the hygrometer was 100°, the minimum 17°, the mean 59°. The *tramontane* north wind seldom descends into the lower plain of Nice, but sweeps directly from the mountains down to the sea; the east wind is dry and cutting, the south relaxing, the SS.W. wind, or *lebec*, is very prejudicial to health. Dew is abundant, but mists are extremely rare. The soil of the environs is an aggregate of chalk, clay, and sand, and of much fertility. The inhabitants are generally of low stature, with a muscular but not fleshy frame, and a pale complexion generally. It is remarked, that where oil is much used for food the complexion is pale, while a diet of milk is attended by a rosy and fresh colour.

The lower class of females at Nice become marriageable at from twelve to thirteen years of age, and mothers of thirteen years are not uncommon. Young ladies marry at from fifteen to twenty, young men at from eighteen to twenty-four. Childbearing is said to cease at from forty-three to forty-five years of age. The average length of life is thirty-one years.

The most prevalent diseases are those of an inflammatory kind,—pneumonia, pleurisy, catarrh, &c., occasioned by sudden alternations of temperature, variable winds, and an atmosphere often charged with irritating matter. Pulmonary complaints have latterly been more numerous among the population (probably owing to Nice having become more than formerly a place of resort for consumptive patients). In the town and immediate district of Nice, from 1828 to 1837 inclusive, there were born 10,968 persons; the deaths in the same period amounted to 9,163. In the south of the province of Nice many mothers are found with eighteen and twenty children; twelve are a frequent occurrence, and from six to eight are quite common; but the average number of children to a marriage is estimated at from four to five. The number of marriages in the province annually is computed at from ten to twelve in every one thousand of the inhabitants.—*Sir J. P. Boileau, in Statist Journ.* for August, 1843.

EFFECT ON A

MALIGNANT TUMOUR OF HYPERIODATE OF ARSENIC.

A woman, forty-six years of age, without children, and who had for more than twenty years suffered from epilepsy, about four years since observed a hard tumour developing itself in her right breast. This was extirpated by Dr. Haeser of Jena, and the patient found little inconvenience for some time afterwards, except from her epilepsy, which regularly returned every month or six weeks. At the beginning of March, in last year, the right axilla became the seat of a tumour, which increased to the size of a pigeon's-egg, and which betrayed a schirrous nature. Dr. Haeser now administered Wachenroder's hyperiodate of arsenic, in a solution composed of four grains and a half of the hyperiodate to five ounces and a half of water, and of which the patient took twenty drops night and morning. As the medicine caused no perceptible sensation beyond a slight impression of warmth in the stomach immediately after being taken, Dr. Haeser augmented the dose at first by three, and afterwards by five drops daily, till the patient ordinarily took at a dose three drachms and a half of the solution, containing somewhat less than half a grain of the arsenical salt. No increase of dose beyond this was attempted; but from March to November the patient had taken in all about five scruples of the hyperiodate. A cautery had been applied to the part affected and a strict regimen ordered. The tumour, though not got rid of, had remained stationary as to size throughout the treatment.

Wachenroder's hyperiodate of arsenic is prepared as follows:—Of metallic arsenic, sublimed in a glass tube, five parts by weight are taken, and digested for an hour with thirty parts of iodine in two drachms of water. The supernatant fluid is then carefully evaporated till only the crystals of the hyperiodate are left. When pure, the solution of four or five grains of this medicament, in six ounces of water, will be perfectly clear and limpid.—*Haeser's Repertorium.*

Recent investigation has proved that with the matter taken from the nostrils of a glandered animal, free from farcy, we can produce the latter variety of the disease, and often in its simple, uncomplicated form, in another animal perfectly free from all disease; moreover, that simple glanders may be generated merely by inoculation with the matter of a simple farcied tumour.—*Vet.*

NORMAL PROPORTIONS OF THE HORSE.

In the French school of veterinary art the height of the horse, measured from the poll of the head to the ground, is estimated at three heads' length; from the top of the withers to the ground, at two and a half ditto; the distance from the point of the shoulder to the point of the quarter at two and a half heads' length; the height from the summit of the croup to the ground at $2\frac{23}{100}$.

From the summit of the withers to the point of immersion of the neck in the throat $\frac{48}{100}$, and the same from the withers in a horizontal line, to a level with the lowest point of the back; from the last-named point, still in a horizontal line, to a level with the summit of the croup; from the summit of the croup, extending the same horizontal line, to a level with the point of the quarter; and from the point of one shoulder to that of the other in a straight line.

From the immersion of the neck in the withers to the mane, half a head's length; and to the point of the shoulder $\frac{62}{100}$ of a head's length; and the same from the point of the quarter to that of the stifle; from one haunch to the other in a direct line; from the summit of the croup to the stifle; from the stifle to the hock; and from the hock to the ground.

The greatest breadth of the belly, in a straight line, equal to one head's length; the depth of the body from the lowest part of the back to its greatest dip, the same. Depth from the summit of the withers to the lowest dip of the chest, one head $\frac{33}{100}$; from the withers to the stifle, one head $\frac{44}{100}$; and the same from the summit of the croup to the elbow. Eclipse had not these proportions; he measured 66 inches (16½ hands) in height, standing an inch higher behind than before, and this great height was still exceeded by the length of his body, that being 69 inches. He was remarkable, however, for the smallness of his head, that being only 22 inches in length, or one-third instead of two-fifths of his height. "Eclipse was never esteemed handsome, yet he was swift, and the mechanism of his frame was perfect," says Saint-Bel, who accordingly set up his proportions for a model in the English veterinary school, Eclipse having been unquestionably a race-horse of the first distinction both for speed and bottom; and who won more renown on the turf than any horse either before or since his day.—*Veterinarian*, Aug.

A German practitioner strongly recommends spirit of ammonia as a local application to bruises, contusions, &c., as a valuable resolutive agent, capable of fulfilling all the objects for which ordinary refrigerants are used.

NEWS OF THE WEEK.

Changes at St. Thomas's.—Dr. Hodgkin we understand has received his dismissal as lecturer on the practice of physic; Dr. Barker has also been politely informed that he will not be required to lecture on materia medica for the future. Dr. Risdon Bennett has been appointed lecturer on materia medica and forensic medicine, and Dr. Munk has received his commission as adjutant-general of the dead house. Dr. Cohen is also in the ranks of the dismissed.

Dr. Rowland, the author of the work on Neuralgia, has been appointed lecturer on medicine at the Charing-cross Hospital School, vice Dr. Bennett, who migrates to St. Thomas's.

Changes at Guy's.—Dr. Bright will not lecture again; Dr. Addison takes the entire course of practice of physic; Dr. Golding Bird succeeds Dr. Addison in materia medica, and a Dr. Gull is appointed lecturer on medical physics.

Complaints, both "loud and deep," are made by the students at Guy's that no available course of comparative anatomy is given in that institution. They remark that the style of the present lecturer on that branch of science is well fitted for a professor of a college in Laperta, and they talk of signing a "round robin" for the purpose of presentation to the lecturer in question, recommending his emigration to that classic island.

The Societé de Medicine of Paris has proposed a prize of 500 francs for the author of the best essay on "the employment of iodide of potassium in syphilitic diseases.' Papers, &c., to be addressed to M. le Dr. Prus, secr. gen. de la Soc., &c., Paris, before the 1st of June, 1844. Any one, Frenchman, Englishman, or Chinaman, may compete for the prize.

The Royal Society of Medicine, Surgery, and Pharmacy, at Toulouse, has proposed, in 1844, to award two prizes of the value of 300 francs (£12) each, for the best essays with the following objects:—

1. "To point out the agency of the nervous system (*le rôle du système nerveux dans*, &c.), on the progress of rheumatic affections; and thence to deduce the modifications which ought conformably to be introduced into the treatment of such diseases."

2. "To determine by chemical experiment the nature of the active principle in oils from the seeds of euphorbias growing on the French soil; to indicate the means of obtaining this in purity (*isoler ce principe*), and point out its therapeutic uses."

The essays may be written in either French or Latin, and must be signed with a motto, or epigraph, and accompanied by a sealed packet containing the name of the

author, and bearing on its exterior a repetition of the motto. Both must be sent, post free, to *M. le docteur Ducasse, secretaire-general de la Societé Royale, &c., à Toulouse*, before the 1st of March, 1844. Members of the society only are excluded from the contest.

MEDICAL practitioners are cautioned against *a spurious preparation of mercury*, presented in the form of a yellow powder, which is at present being sold for mixing with ointment, to produce an imitation of the *ung. hydr. nitr.* of the Pharmacopœia. The preparation (as the *Chemist* argues) bears the mark of fraud in its very name. It is called *subnitrate* of mercury; whereas, in the ointment, as made according to the directions of the Pharmacopœia, "It is quite evident that a *super*-salt, with a large excess of acid, and not a subnitrate, is produced. The peculiar changes which the metallic solution and the fatty matters undergo, are but imperfectly understood, but it has been generally supposed that intimate combination takes place—that a nitrate of the peroxide of mercury remains in close connection with the oil, &c., while the latter are partly oxidated, and elaïdate of the oxide of glycerule, and other new compounds result, and in the newly made ointment a little free acid is also present. The spurious preparation in question possesses the quantity, neither of mercury nor of nitric acid, employed in the preparation of the *ung. hyd. nitr.*, and is wanting in many of its most valuable properties.

A DOCTOR of medicine, four apothecaries, and a printer, were lately summoned before the police court of the Department of Seine, in France, for the sale or making public of an article named *philhygie* by its inventors, and sold as a secret preparation. The tribunal acquitted three of the apothecaries and the printer, but cast the physician and one of the apothecaries in a fine of 200 francs each and costs.

NEW PRESERVATIVE FOR ANIMAL SUBSTANCES.—A French physician has addressed a paper to the Academy of Sciences on the power of a *syrup of iron* to preserve animal substances unchanged. This syrup is a combination of sugar and iron which does not decompose, crystallise, or ferment, at any temperature. Meats kept in this syrup diminish very little in weight, resist the most active putrefactive agency, and on being washed in cold water resume their original volume and appearance as from animals newly killed.

NEW METHOD OF PROCURING BORACIC ACID.—The ordinary process for obtaining this substance has been by the decomposition of borax by sulphuric acid, but the latter acid invariably adulterates the product in this case. To avoid this a German chemist has lately made known in the "Revue Scientifique" that he dissolves forty parts of borax, together with a proportion of soda in a hundred parts, by weight, of boiling water, and adds to the solution, while yet warm, twenty-five parts of muriatic acid. As the liquid now cools, the boracic acid is deposited in crystals, which may be collected and purified by repeated washings. Some traces of muriatic acid may exist to adulterate the product, even after this, but these can easily be got rid of by submitting the latter to a temperature a little above that of boiling water.

BLEEDING AT THE NOSE.

DR. NEGRIER, of Angers, whose grand discovery of the cure of epistaxis by simply raising the arms while the nostrils are compressed we noticed in the last volume of THE LANCET (p. 110), has given us his explanation of the *modus operandi* of the remedy. M. Negrier is convinced that raising the arms arrests the rapidity of the flow of arterial blood towards the head. How should this be? Just the contrary effect seems more likely to happen, and that in proportion as the arterial current were impeded in its propulsion through the arms, as must ensue on their upraised position for any length of lenth of time, it would be determined to the head. Adverting to the alleged physiological cause of this *popular fact*—for such we learn that it is in some parts of America—a correspondent conjectures that the arms being upraised, greater facilities are mechanically afforded for the return to the heart of the blood in the *veins* of the head, which, accordingly, soon become less distended, and the blood less readily escapes from the nose. M. Negrier reports, in the "Gazette des Hôpitaux," that one of his colleagues gets rid of cerebral congestions to which he is subject, by the elevation of both his arms above his head; and that in another individual the adoption of the same means cured violent headach.

MORPHINE OBTAINED IN A CRYSTALLISED FORM WITHOUT THE EMPLOYMENT OF ALCOHOL.—A plan for this end has been discovered by M. Michiels, an apothecary at Antwerp. Twenty-two drachms and a half of muriate of morphia are dissolved in about three quarts of boiling water, and half an ounce of muriatic acid. The solution is then thrown into a heated porcelain vessel in which a mixture of two ounces of liquor ammoniæ and four ounces of water has been immediately before placed. The morphia is soon seen deposited in large quantities under the form of long flattened crystals (lamelles tres allongées). When the mother liquid is cold, it should be filtered; the crystals of morphia to be afterwards washed with cold water, and dried at a moderate temperature.—*Ann. de la Soc. de Med. d'Anvers.*

TREATMENT IN CHOLERA.—A physician of Freienwalde has, it is said, in the "Medic. Zeitung.," proved the acetate of lead, with strychnine, to be effectual in causing the immediate cessation of the vomiting in sporadic cholera, and in tending to the speedy cure of that disease. The urinary secretion is, however, suspended under its employment, sometimes for as long a time as two days. Dr. Steinbach, of Brandenburg, is an advocate for the acetate in the same disease, but in combination with a solution of pure tannin. This mixture, he says, is specially indicated in the cases in which a softening of the gastro-intestinal mucous membrane is present.

NERVOUS HEADACH, &c.—A physician of Marseilles has found headaches of a kind dependent on nervous disturbance, obstinate tic-douloureux, &c., curable by the application of liquor ammonia (*l'ammoniaque depuis le vingt-cinquieme degré jusqu'au trente-deuxieme*), on a dossil of lint, to the alveolar border of the palate. The solution is to be retained in contact with the mucous membrane immediately within the teeth, until an abundant effusion of tears is excited, when the exacerbation of pain will suddenly cease. This remedy proves more efficient against tic-douloureux attacking the frontal and facial than the occipital nerves; but it has been successful in several authenticated instances in which the latter have been the seat of pain.

POPULATION OF BELGIUM.

THE census of this (relatively) most populous country in Europe for 1842, is, we believe, not yet published. At the end of 1841 its 86 towns contained a population of 1,006,117, and its rural districts 3,111,485 persons; total, 4,117,602. Births in 1841, 37,222 in the towns, and 106,438 in the other communes. Deaths, 30,391 in the former, and 72,227 in the latter. Marriages, 28,963. The number of females, as usual, surpassed that of males; and the number of widows was double that of widowers. As many males were below as above 23, and as many females below as above 25 years of age. The number of males between 20 and 50 amounted to 778,381.—*Echo du Monde Savant.*

I WAS for many years persuaded that puerperal convulsions only happened when the head presented; but experience has proved that they sometimes occur in preternatural presentations of the child. Of 19 cases recorded by Dr. Joseph Clarke, 16 were of first children; and such was the case in 36 instances out of 48 related by Dr. Merriman. Of 30 cases which occurred to Dr. Collins, 29 were in women with their first children, the other single case was in a second pregnancy, but in a woman who had suffered a similar attack in her first. Out of the 32 children (there being two twin cases) 14 were born alive.—*Dr. R. Lee.*

ROYAL COLLEGE OF SURGEONS IN LONDON.

LIST of gentlemen admitted members on Friday, August 11, 1843:—A. W. Gange, E. Pemberton, W. Clegg, F. Smith, D. Corbett, R. Oxley, J. H. Wise, G. Buckell, J. Hunt, J. Skelton.

CORRESPONDENTS.

WORMS IN THE SKIN.—A correspondent, referring to the recent letters of Dr. Green, in THE LANCET, on the supposed cases of live entozoon worms in the human skin, writes to us as follows:—"That the human skin is infested with follicular entozoon worms, nearly every one who has studied the subject must be aware:—these little insects inhabit the sebaceous follicles, living on the matter there secreted, and they consist of a head, thorax, and long tail, with four limbs on either side. With regard, however, to the case stated by Dr. Green, it can only be accounted for by supposing it to be a case of *malis Gordei*, the sixth species of the genus of cutaneous vermination, and which class of disease is well described in the fifth volume of Good's Study of Medicine, where they are described as resembling black hairs lodged under the skin; when the skin is warm they appear, but while it is cold they keep buried under its cover, which might account for their coming out in such numbers when the patient is in bed, or when under the influence of the vapour-bath. We are told, in the volume I have quoted above, that when a similar complaint prevailed in Seyne, in 1776, friction with the hand proved a certain cure, and brought forth a number of dark-brown filaments, resembling hair, often not more than a twelfth of an inch in length, and in some instances furnished with a minute bulb at the extremity."

To the Editor.—Sir: THE LANCET, page 620, contains a communication from Dr. J. H. Davis, recommending *tissue-paper* in conjunction with the application of blisters in young subjects. Should this be received as an original suggestion, I beg to state that I have used it for many years, having first witnessed its good effects in the practice of Dr. Thomas Lane, of the Wexford County Fever Hospital. It will also be found a useful precaution in tropical climates, with patients of a delicate habit of body. I remain, Sir, your obedient servant,

EDWARD GIBBON, M.D., M.R.C.S.

Croydon, August 7th.

*** Tissue-paper was used by the late Professor Davis at least *twenty-five* years ago. His son claims no *originality*.

A Student.—We believe that they are not, but at Hanwell the privilege is granted to students.